The Quality of Life of Low-income Groups: A micro-level study

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Discussion Paper No. 34
2001

Kerala Research Programme on Local Level Development
Centre for Development Studies
Thiruvananthapuram

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English
Discussion Paper

First published 2001
Editorial Board: Prof. P. R. Gopinathan Nair, H. Shaji
Printed at:
Kerala Research Programme on Local Level Development
Published by:
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Kerala Research Programme on Local Level Development,
Centre for Development Studies,
Prasanth Nagar, Ulloor,
Thiruvananthapuram 695 011
Tel: 0471-550 465, 550 491
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E-mail: krp@md1.vsnl.net.in
Url: http://www.krpcds.org/
Cover Design: Defacto Creations

ISBN No: 81-87621-36-2

Price: **Rs 40**
US$ 5

KRPLLD 2001 0750 ENG

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1. Introduction

Quality of life is a multi-dimensional concept as it depends on the extent of fulfilment of the biological, social, economic, and psychological requirements. This study attempts to examine the quality of life of low-income households in Thiruvananthapuram district.

Concepts

Poverty

Quality of life of a people depends on the level of its well-being. Deprivation of well-being makes life poor. The concept of poverty is perceived variously based on income, satisfaction of basic needs, and capability to function. In the 'income' perspective, an individual is viewed as poor only if his income level is below the defined poverty line. The 'basic-need' perspective goes beyond this. Deprivation of material requirements for minimally acceptable human needs including health, education, and essential services is considered here to determine the extent of poverty. In the 'capability' perspective, poverty represents the absence of some basic capabilities to function.

Estimates of poverty in India were first made in 1971 by Dandekar and Rath. (Dandekar and Rath, 1971). Bardhan (1973) and Ahluwalia (1977) produced their estimates in quick succession. These initial attempts based their concept of poverty on per capita calorie intake or income. Several other factors including necessary items of private and social consumption such as housing, education, and health were not considered in these exercises. Furthermore, even the estimates they made were themselves called into question since it is difficult to fix the minimum calorie requirements for a highly heterogeneous population. This heterogeneity is due to interpersonal variations in age, sex, and activity levels.

The measurement of poverty or human well-being based on income has several limitations. Carl Riskin has emphasised that income as conventionally measured, clearly excludes or

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ACKNOWLEDGEMENT: *I am deeply indebted to Dr K. N. Nair, Programme Co-ordinator, Kerala Research Programme on Local Level Development (KRPLLD), and Dr K. Ramachandran Nair, former Head of the Department of Economics, University of Kerala, for their dedicated guidance and help without which this project would not have been completed. I am thankful to R. Santhosh Kumar, V. Sree Hari, and J.S. Suma for their sincere assistance in carrying out the study. I wish to acknowledge my gratitude to Mr C.E. Ajith Kumar, Computer Programmer, College of Agriculture, Thiruvananthapuram, and Dr Jayasree, for their co-operation and assistance at all stages of the work.I have pleasure in placing on record the kind co-operation of the social activists Kanjiramkulam Surendran, and B. Vijayakumar, and panchayat members Manian and Lawrence. Finally, I owe deep gratitude to Dr K. Nagaraj, Professor, Madras Institute of Development Studies, who went through the draft and offered valuable suggestions.*

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undervalues services that are crucial to human well-being (Riskin, Carl, 1993). Schultz also argued that poverty cannot be measured simply in terms of a certain low level of income because there are families, which have relatively low amounts of income but own substantial amounts of wealth. Inflation too will reduce the real value of any income or consumption level, causing the poverty line to shift upward (Schultz, Theodore, 1968). The World Development Bank Report 1990 observes that any income-based poverty line should be based on a social estimation of the cost of participating in the every day life of the society (World Bank, 1990). Dreze and Sen have emphasised the distinction between growth-mediated and policy-mediated welfare. In many cases, the link between income and important welfare outcomes such as longevity is weak (Dreze and Sen, 1990).

A. M. Khusro has emphasised the need for developing alternative methodologies of poverty estimation focusing on the total quality of life rather than calories or food consumption. Strategies have to be evolved where the consumption of public goods, along with personal expenditure, is given importance. Several factors such as literacy, health, education, and housing are left out of reckoning by the calorie and food-based indices of poverty. People in India purchase their food and other necessities, but their literacy, education, health, and such services are not acquired in the same manner. These services are either rendered by the State free of cost or are at highly subsidised rates. Personal expenditure data do not capture this massive consumption (Khusro, A. M, 1988). V. K. R. V. Rao also approached this problem from a wide perspective. For him, 'poverty has to be identified with deficiency in the total level of living, which includes not only energy requirements but also a balanced diet needed for health and other basic needs essential for human existence at a tolerable level' (Rao, V. K. R. V., 1977). Obviously, his perception too was severely constrained.

Well-being

The concept of well-being is not one of just theoretical interest. Its interpretations have serious implications for political arguments and social criticisms on the one hand and on the directions of policy and planning on the other. Dominant approaches to the idea of well-being are based on utility, opulence, and capability. The 'utility' approach goes back to the utilitarian tradition, so dominant in economics from the period of J. Bentham. Utilitarian interpretations are based on parameters such as happiness, pleasure, and desire-fulfilment. Utilitarian thinkers strongly supported the identification of utility with well-being. Amartya Sen argues that one may identify personal well-being with individual utility, but nevertheless refuses to follow utilitarianism in ranking social status in terms of the sum of individual utilities (Sen, Amartya,). The obsession with utility, i.e. judging everything on the scale of utility, is the fundamental inadequacy of this approach. This approach will give adequate importance to the redressal of various forms of deprivation such as hunger and inequality only if there is a demonstrable net utility gain through that removal.

The 'opulence' approach is more widely in use. Its origin may be traced to the days of Adam Smith. Here, well-being is closely associated with being well off. It is a matter of having goods and services. In other words, this approach sees commodity as the basis of well-being. According to Amartya Sen, the possession of commodities alone cannot make them valuable. Their value rests on what commodities can do for the people or, rather, what the people can

do with these commodities (Sen, Amartya, 1985). Though this point is obvious, it is worth mentioning because 'commodity fetishism' is a widespread phenomenon. The increasing exchange of commodities in modern society sustains such fetishism.

An alternative approach to the concept of well-being has been suggested by Amartya Sen - the 'capability' approach, which according to him, can be linked with the ideas of Adam Smith, J.S. Mill, and Karl Marx. According to this version, increase in well-being would mean expansion of human capabilities to function.

Quality of life

Since well-being is influenced and determined by several inter-related variables, a multi-dimensional approach is essential for examining it. In other words, well-being is understood best in terms of the quality of life. But how is quality of life understood? Different definitions of this concept have been proposed. Last defines it, in a general sense, as that which makes life worth living - in a more quantitative sense, an estimate of life remaining free of impairment, disability or handicap (Last, J. M, 1983).

The 'quality of life' has been defined by the World Health Organisation (WHO) as "the condition of life resulting from the combination of the effects of a complete range of factors such as those determining health, happiness, education, social and intellectual attainments, freedom of action, justice, and freedom from oppression". According to Nagpal and Sell, 'quality of life' is a "composite measure of physical, mental, and social well-being as perceived by each individual or by a group of individuals - i.e. to say happiness, satisfaction, and gratification as is experienced in such life concerns as health, marriage, family, work, financial situation, educational opportunities, creativity, belongingness, and trust in others (Nagpal, R and H. Sell, 1985). All these definitions are highly meaningful and comprehensive but are of little practical applicability.

To serve as practical tools of measurement, a couple of composite indicators of development, Physical Quality Life Index (PQLI) and Human Development Index (HDI) have been suggested in more recent years.

Measurements

PQLI was suggested in 1977 as a measure of economic and social well-being by the Overseas Development Council (ODC) of the United States (Overseas Development Council, 1977). It is a composite index constructed by using three indicators - life expectancy, infant mortality, and rate of literacy - giving equal weight to each. The ODC report furnished estimates of PQLI for 150 countries.

Quality of Life Estimates

Following the methodology of ODC, Tewari and Joshi worked out the PQLI for Indian States for the year 1961, 1971, and 1981 (Tewari, R. T. and Joshi, 1988). Using the same methodology, the PQLI for the State of Kerala was computed by P.P. Pillai in 1994.

Pillai's estimates showed that the PQLI of Kerala was way ahead of that of India. For instance, in 1961 the PQLI of Kerala was 50.47 as against 30 in India, and in 1991 the figures were 90.52 and 55.45 respectively (Pillai, P. P., 1994).

Since 1990, the United Nations Development Programme (UNDP) constructed another composite index called Human Development Index (HDI) by using three indicators such as life expectancy, literacy, and income. This is different from PQLI, as it takes income as a component of the index and drops infant mortality rate. The Human Development Report 1990 contained the estimated HDI for 130 countries for the year 1987. The HDI values of 44 countries including India were less than 0.5, with India securing the 94th position (UNDP, 1990). The estimates of Human Development Index for 1994 available from the Human Development Report 1997 showed that the value of HDI for India was 0.446, with India occupying the 138th position among 175 nations (UNDP, 1997). Following the UNDP method, Sivakumar made an attempt to estimate the HDI for all the States in India for the year 1987. According to this estimate, Kerala had the highest Human Development Indix of 0.651 and Uttar Pradesh the lowest HDI of 0.292(Sivakumar, A. K, 1991).

An objection raised against the use of life expectancy and income as yardsticks of the quality of life at macro levels is that distributional issues are ignored. For instance, a high per capita GNP may hide the fact that some people are very rich and some others very poor. Similarly, a high average life expectancy may conceal the reality of very long life for some people and extremely short life for others.

In the Human Development Report 1997, the 'human poverty was measured in a composite index, comprising the different features of deprivation in the quality of life. Human Poverty Index (HPI) was calculated on the basis of variables such as the levels of deprivation in longevity, in knowledge, and in decent standards of living.

The deprivation of survival or longevity is represented in the HPI by the percentage of people expected to die before the age of 40. Deprivation with regard to knowledge is measured by the percentage of illiterate adults. Decent standards of living encompass three related variables - access to health services, safe water, and nutrition. The deprivation of these factors results in a reduction of the standard of living. HPI gives importance also to factors such as malnourishment of children under five years of age, but does not consider per capita GNP as an important indicator of the quality of life.

Estimates of HPI have been prepared for 78 developing countries by the UNDP. According to this study, India occupies the 47th position with an HPI value of 36.7 per cent. The HPI values for the States in India show that Kerala is well ahead of several other States. For Kerala, the HPI value is only 15 per cent whereas it is higher than 50 per cent in Rajasthan and Bihar. We thus find that most of the methods attempt to estimate quality of life and welfare at macro-levels. Village-level studies have the advantage of identifying and highlighting relations among economy, culture, and politics as they operate at the grassroots-level. There exist several studies of this type too.

An attempt was made by Dhanasekhar to evolve a new measure of poverty applicable to rural

areas, which may be called Rural Quality of Life Index (RQLI) [Dhanasekhar, 1997]. His study was undertaken in a village in Periyar district in Tamil Nadu. This index was constructed after considering variables such as social status, income status, nutritional status, clothing and housing, applying equal weights to all the variables.

In an effort to address the deficiencies in the estimation of poverty and the quality of life, the Government of Kerala has experimented with an alternative way of defining poor households for targeting anti-poverty programmes. A Family Poverty Index (FPI) was developed, which allowed local communities themselves to identify the poor households. This index was evolved during the course of implementation of the Urban Basic Service for the Poor (UBSP) and the Programme and Community-Based Nutrition Project (CBNP) in Alappuzha town in Kerala in 1993. FPI was constructed combining nine socio-economic variables, selected and approved by members and representatives of the local community. A poor family is identified as one which

(i) lives in a thatched hut;
(ii) has illiterate adults;
(iii) has one or no adult employed;
(iv) has no access to safe water;
(v) has no sanitary latrine;
(vi) does not eat more than two meals a day;
(vii) has an alcoholic or drug addict;
(viii) has children below 5 years; and
(ix) belongs to Scheduled Castes and Scheduled Tribes

A poor family may not have all these nine characteristics. If a family had at least four of them, it was treated as poor.

This poverty index has explicit limitations. For instance, families with one well-employed adult and other adults either studying or not employed, cannot be considered poor. It is also not clear as to why families with children below five years should be considered disadvantaged.

The discussion in this study is presented in the following order. In Section II, the area and the objectives and method of the study are outlined. Section III gives socio-economic profiles of the two *panchayats* under study. The results of the field investigation are analysed in Section IV. The major conclusions of the study are drawn in the final Section.

2. Area, Objectives, and Method of Study

This study is aimed at examining the quality of life of people in two *panchayats* in Thiruvananthapuram district, one a coastal *panchayat* (Karumkulam) and the other a little towards the interior (Kanjiramkulam). The specific objectives are the following:

(i) Assessment of the nature and composition of the quality of life of the sample group of low-income households;

(ii) Discussion of the roles played by the State, Church, and non-governmental organisations in improving the quality of life; and

(iii) Analysis of the inter-household inequality among low-income households.

Multi- stage random sampling has been used for selecting the sample households for survey.

Before undertaking the survey, the socio-economic conditions of Thiruvananthapuram district were examined. The required information was gathered from secondary sources such as Census reports, Statistics for Planning and Economic Reviews of the State Planning Board. It was observed that compared to the districts of Ernakulam, Idukki, Kozhikode, and Thrissur, Thiruvananthapuram is economically backward. In 1994-'95, the per capita income of Thiruvananthapuram at current prices was Rs 7039, which though slightly higher than the State average of Rs 6983 was much less than the national per capita income of Rs 8237 (Government of Kerala, 1995). The level of unemployment is also the highest in Thiruvananthapuram among the districts of the State. Twenty-three per cent of the total job seekers of the State belonged to this district. Since the degree of deprivation is, in general, higher in the rural areas of the district, the present study has chosen to focus on the low-income groups of the two selected *panchayats*.

On a preliminary enquiry, we found that health facilities and housing conditions were extremely poor in Karumkulam. The Pulluvila hamlet of Karumkulam *panchayat* had, in fact, conducted massive agitations demanding better health facilities. It was estimated that more than 40,000 fish workers in this hamlet participated in the public rally held for the purpose. An organisation called 'Hospital Protection Council' was formed to spearhead their agitation. Nearly 42 per cent of the dwellings in the area were so poor that they were below the taxable limit. The effective literacy rate was 79 per cent only (Karumkulam *Grama Panchayat*, 1996). The very high density of population in this *panchayat* (population: 32,830 in 1.25 sq. miles), has secured it a place in the Guinness Book of World Records, according to the Development Report published as part of the People's Planning Campaign by the Karumkulam *Grama Panchayat*, 1996.

Kanjiramkulam, the interior *panchayat* selected for this study, lies close to Karumkulam. In this area, there are 12 colonies in which only low-income people live. Nearly 30 per cent of the houses are below the exemption limit for house tax and more than half the population is poor. In contrast to Karumkulam, the literacy rate is high (92%). The employment levels in this *panchayat* appeared to be low too (Kanjiramkulam Grama Panchayat, 1997).

Sampling

Two wards, one from each *panchayat*, were selected for detailed study. The wards selected were identified as the poorest in the respective *panchayats*.

For the purpose of identification, housing condition was taken as the criterion. The '*Panchayat* House Tax Assessment Register' was used as the basis for identifying housing conditions. Field visits and interaction with officials and non-officials were attempted in the poorest wards in these *panchayats*. Ward No II (*Harijan* Ward) of Kanjiramkulam and ward No VII of Karumkulam were reportedly the two wards with the highest levels of poverty. The proportion of houses exempted from house tax is the highest in these wards (48 per cent of houses in Kanjiramkulam Ward II and 55 per cent of the houses in Karumkulam Ward VII). Most of these houses have been included in the category of *Kudil* (hut) and many of them are located in colonies.

Data

House visits in company of a member of the *panchayat* (Mr Manian from Kanjiramkulam and Mr Lawrence from Karumkulam); discussions with the *panchayat* officials and social activists and ward meetings were held to ascertain that these were the two wards where quality of life was the lowest in the *panchayats*.

To gather further details relating to the quality of life in the selected areas, a household survey of socio-economic conditions was conducted using a pre-tested interview schedule.

In order to identify the households to be included in the sample, the following steps were taken:

(i) A pilot study was conducted. All houses in the selected wards were visited. Identification particulars –such as the name of the head of the household, house address, educational status of the head of the household, his occupation, caste, income, and size of the household – were collected. This information was useful for further stratification and for selecting the sample group.

(ii) It was felt that in many cases, the income reported by the head of the household was not reliable. Thus, the selection of a sample group of low-income households on the basis of their income became difficult. In order to make the sample more representative, a 'wealth-ranking' was made.

A household is defined as a group of people (normally related) who live together, share resources and tasks of production, and share in the consumption of what the household produces. The head of the household is the person accepted as the 'head' by the members of the household. Normally, he/she is the chief earning person who takes care of the other members.

For wealth-ranking, the names of heads of the household with house addresses were written

on separate cards. Wealth-ranking was made by two knowledgeable persons (informants) in each *panchayat*.

Before the wealth-ranking was conducted, the objective of the study, the purpose of wealth-ranking and the value of understanding the problems encountered by the people of the locality were explained to the informants. In both the *panchayats*, the informants decided to classify the households into three groups – A, B, and C; where group C comprised the poor households. Accordingly, the informants sorted the cards into three piles. In some cases, informants were unsure where to include certain households. Such cases were not included in the sample. Wealth-ranking was made by each informant independently. Since the informants were aware of the socio-economic status of the people of the locality, the ranking was made after considering different parameters, which they thought, were important determinants of wealth.

(i) Here 'wealth' is defined in terms of access to or control over important economic resources and services. Wealth status is not merely an economic attribute of a person or household. It has important social and political correlations. Though wealth status is not the only determinant of the quality of life of a household, if affects almost every aspect of the life of its members. Other inequalities based on caste, race, etc., are also often correlated with wealth status.

(ii) In making a 'wealth-ranking', indigenous conceptions of 'wealth' have to be taken into account, and one must examine the suitability of such conceptions for this study. It was found that several factors such as land holding, livestock, education, housing, and employment, which we consider determinants of the quality of life of a household, were included in the Local Conceptions of Wealth.

Two sample groups of 100 households, one group from each ward, were then selected. This selection satisfies the following two conditions:

(i) The income reported by these households is low; 75 per cent of them have income below the poverty line.

(ii) Both the informants of each *panchayat* included these households in group C – the group of poor people.

Most of these households belonged to the category 'exempted from house tax'.

After identifying the households to be included in the sample group, a test of the interview schedule was conducted by interviewing 10 households in each ward. After pre-testing the questionnaire to include questions on consumption expenditure, health status, housing amenities, and assets of households, a question on gender-equality was added.

3. Socio-economic Profile

Karumkulam and Kanjiramkulam *grama panchayats* belong to Athiyannur block *panchayat* of Neyyattinkara taluk in Thiruvananthapuram district. In 1991, the average literacy rate was 84.48 per cent in Athiyannur Block. Among the 12 block panchayats of Thiruvananthapuram district, Athiyannur had the lowest rate of literacy. The work-participation rate in 1991 in both the panchayats were lower than the average for the Athiyannur block (Karumkulam - 30.48 per cent; Athiyannur block - 32.31 per cent). The work-participation rate of Athiyannur block itself was one of the lowest in Thiruvananthapuram district. While 42 per cent of the houses in Athiyannur block were thatched houses, the corresponding percentage in Karumkulam and Kanjiramkulam was as higher as 65. Only 36 per cent of the houses of Karumkulam had electric connection.

Kanjiramkulam

Before the formation of the State of Kerala, Kanjiramkulam was part of Travancore. The Neyyattinkara *Taluk Sabha* was formed in 1938 and several local development bodies were formed under the auspices of this organisation. The Village Upliftment Committee and the Young Men's Bureau (YMB) had been formed in the 1930s. Most of the young intellectuals of the locality were members of the YMB. The land for Kumuli Safe Water Project was purchased and donated by YMB.

Kanjiramkulam *panchayat* was formed after the integration of Travancore and Cochin in 1949 and comprises Kanjiramkulam village and a portion of the adjacent Kazhivoor village. The total area of the *panchayat* is 10.36 sq. km. and the population is nearly 17500 (1991 census). It consists of nine wards, one of them being a *Harijan* ward. Nearly 70 per cent of the population belong to the *Nadar* Community. There are 5592 houses. Among them, 1827 had been exempted from house tax, as they are small huts. Many of these houses are located in colonies. About 15 per cent of the households belong to Scheduled Castes. There are 12 colonies with low-income households in this *panchayat*. Several small huts were shared by more than one family.

A major portion of the work force belongs to the unorganised sector. More than half the male and 90 per cent of the female labour force were unemployed, according to the *panchayat* data report of Kanjiramkulam *Grama Panchayat* (1996). The 1991 census shows that 3560 adults are employed and 4431 persons unemployed. Among the females, the corresponding figures were 825 and 7592 respectively.

The majority of the employed persons belong to the agricultural sector followed by construction sector. Coconut is the major agricultural produce. Rice is seldom cultivated here. The shortage of water hampers agricultural development in this area and the existing irrigation facilities can meet the requirement of only five per cent of the land under cultivation.

The literacy rate in 1991 was 90.2 per cent. Five lower primary schools, one upper primary school, four high schools and one government arts and science college function here. Together with these institutions, parallel colleges and pre-primary coaching centres also operate

in this village. The infrastructural facilities of the schools are poor. Among the 10 schools, six schools do not possess separate rooms for the teaching staff. Laboratory facilities are not available in six schools. Five schools do not have libraries. Only five schools have electricity. Toilet facilities are not available in three schools.

Health care facilities are provided through three government dispensaries (two ayurvedic dispensaries, one homoeopathic dispensary) and one primary health centre. The ayurvedic dispensaries were established in 1956 whereas the primary health centre became operational only in 1995. The shortage of staff, medicines, bed, and toilet facilities constrains the functioning of these institutions. One veterinary hospital and another ICDP sub-centre also function here.

Seemingly, the key distinction between 'not employed' and 'unemployed' is not taken into account. Only those who are not employed and are seeking work can be considered unemployed.

Earlier, some small-scale industrial units had functioned in Kanjiramkulam in areas like milk-processing, manufacturing of coir products and matchboxes, and weaving. However, none of these industrial units is functional now. Lack of proper planning for sustainability and marketing problems are stated to be the major reasons for their disappearance.

The main mode of transport is the bus services provided by Kerala State Road Transport Corporation (KSRTC). Except for the main roads, maintenance of roads in the village is poor. There is only one recognised market in this area. There are 11 non-governmental organisations involved in cultural activities and sports; but only two such organisations possess own buildings and other infrastructural facilities.

Karumkulam

Karumkulam is a narrow strip of land lying between the Arabian Sea and Vizhinjam. Owing to the high density of population (26000 persons per sq. km), it occupied a place in the Guinness Book of World Records. It possesses a total area of 1.26 sq. miles and the population is nearly 33000. It has 11 wards.

Some events of historical importance are associated with this village. Sree Narayana Guru, the great social reformist, abolished the practice of child marriage (*Kettukalyanam*) among *Ezhavas* at Vadavinkara house here at the dawn of the twentieth century. St. Andrew's Church in Karumkulam (called *Thai Palli*) was established by the Portuguese. St. Nicholas' Church (known as *Kochu* Edathwa), an important pilgrimage centre, is situated in this locality. A 150-year-old church named after Francis Xavier and St. Joseph's Church (established in 1935) are the other important churches. Missionaries of Charity, the organisation established by Mother Teresa, also function in this area.

Fishing is the major economic activity of the people with as many as 4591 families engaged in it. However, only 678 families own equipment for fishing. Scarcity of water and manure has impeded the development of the agricultural sector of this *panchayat*.

Coconut is the main agricultural product. The average yield from coconut trees, though, is lower than the State and district averages (5890 for Kerala State, 6672 for Thiruvananthapuram district, and 4003 in Karumkulam per hectare). Five per cent of the labour force depends on livestock for livelihood.

Medical facilities in the village are provided through a primary health centre. Earlier, there were three doctors here but now there is only one. This health centre does not possess the facilities needed for in-patients. There are no separate medical care facilities for women and children. The most common diseases found in the village are scabies, other similar skin diseases, tuberculosis, asthma and other breathing disorders. During the rainy season, diarrhoea and dysentery are common. In summer, chicken pox and measles spread in this area. There is also one veterinary hospital at Puthiathura.

The level of literacy (79.02 per cent) is very low in Karumkulam. The older generation of men and women are illiterate. Now, there are six lower primary schools, one upper primary school and one high school here. Two industrial training centres, four parallel colleges and seventeen *anganwadis* also function here.

The housing facilities in the village are also poor. The total number of houses is 6522. Among them, 5067 houses do not possess latrines, and 3485 houses do not have electricity. Only 1209 households possess *pattayam* (ownership title) for their houseplot. The IRDP survey held in 1992-'93 showed that 3304 households live below the poverty line. At present, no industrial unit functions in this area except for the one run by women at Puthiyathura, producing and selling readymade garments. The main source of transport is the bus services provided by KSRTC. There are 19 ration shops and one *Maveli* store. This means that, on an average, a ration shop provides services to more than 1000 persons. There are two libraries in the village with limited facilities.

As already noted, the geographical area of Karumkulam is much lower than that of Kanjiramkulam (2.016 sq. km and 10.36 sq. km respectively). Karumkulam has 4,940 households per sq. km whereas the figure for Kanjiramkulam is 387. The settlement pattern in Kanjiramkulam is scattered similar to that in most parts of Kerala. Karumkulam has a clustered pattern where houses are very close to one another. This settlement pattern is very much reflected in their hygiene practices and general living conditions.

Socio-economic status of households

The analysis of the data collected from the sample households of Karumkulam and Kanjiramkulam *panchayats* gives the following results.

The average size of a household in Karumkulam is 5.3 persons whereas it is 4.37 persons in Kanjiramkulam.

Housing

Housing includes not only the 'physical structure' providing shelter but also the immediate

surroundings and the related community services and facilities. World Health Organisation (WHO) prefers the term "residential environment" to 'housing' and defines it as the physical structure that man uses and the environs of that structure including all necessary services, facilities, equipment and devices needed or desired for the physical and mental health and the social well-being of the family and the individual.

The Environmental Hygiene Committee (1949) in India defined a house as a residential house/flat/tenement designed for 'family life' and recommended the following standards for rural housing (Government of India, 1949).

(i) There should be at least two living rooms;
(ii) Ample veranda space may be provided;
(iii) The built-up area should not exceed one-third of the total area;
(iv) There should be a separate kitchen with a paved sink or platform for washing utensils;
(v) The house should be provided with a sanitary latrine;
(vi) The window area should be at least 10 per cent of the floor area;
(vii) There should be a sanitary well or a tube well within a quarter of a mile from the house;
(viii) It is unsanitary to keep cattle and livestock in dwelling houses. Cattle sheds should be at least 25 feet away from dwelling houses. A cattle shed should be open on all sides; an 8 ft. x 4 ft. area is sufficient for each head of cattle; and
(ix) There should be adequate arrangement for the disposal of wastewater, refuse, and garbage.

Since the housing conditions in the study area are poor, all these norms cannot be strictly followed in assessing the quality of houses. In this study, the quality of a house is assessed, therefore, by considering factors such as the area of the house, the nature of its roof, floor and walls, the availability of electricity, and latrine and bathroom facilities.

To ascertain the quality of the roof, floor and walls, different alternatives were considered. For instance, the quality of the roof of a house was judged in terms of the roofing material: thatch, sheet, tile or concrete (Table 3.1).

Though the quality of the houses in both the *panchayats* is, in general, poor, it is poorer in Karumkulam than in Kanjiramkulam. In Karumkulam, 63 per cent of the houses had scores less than 11; the corresponding proportion in Kanjiramkulam was only16 per cent.

The differences observed in the size of the houses as between Karumkulam and Kanjiramkulam are significant. Nearly two-thirds of the houses in Karumkulam are small huts with floor area less than 20 sq. metres; but only one-fourth of the houses in Kanjiramkulam belongs to this category. Only 13 per cent of the houses in Karumkulam have floor area larger than 50 sq. metres; while in Kanjiramkulam, 21 per cent of the houses belong to this category.

Table 3.1 Housing conditions

Value	No. of households Karumkulam	Kanjiramkulam
6	12	-
7	18	4
8	12	3
9	2	4
10	19	5
11	3	10
12	-	8
13	4	11
14	-	10
15	8	5
16	6	8
17	2	12
18	1	6
19	5	5
20	1	1
21	4	2
22	1	4
23	2	2
Total	100	100

Table 3.2 Floor area of the houses

Area (in Sq.metres)	No. of households Karumkulam	Kanjiramkulam
< 20	63	25
20 - 50	24	54
50 - 100	8	14
> 100	5	7
Total	100	100

Table 3.3 The ratio of windows and doors to floor area

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
< 20per cent	70	36
20per cent - 40per cent	24	46
> 40per cent	6	18
Total	100	100

Inadequacies related to ventilation (doors and windows) in a house will adversely affect health status and environmental factors. It is observed that such facilities are very poor in 70 per cent of the houses studied in Karumkulam and 36 per cent in Kanjiramkulam. Adequate facilities are available in only six per cent and 18 per cent of the houses in Karumkulam and Kanjiramkulam respectively. Compared to Kanjiramkulam, these facilities are little developed in Karumkulam.

Environment

Nature of *choolah* used, type of latrine, methods of waste disposal and overcrowding are some variables that influence environmental status. Most of these variables are the determinants of the housing conditions also.

Table 3.4 Nature of *choolah* used

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
Smokeless *Choolah*	8	11
Ordinary *Choolah*	92	89
Total	100	100

Most of the households do not possess smokeless *choolah*, mainly due to reasons such as inadequate space, very poor housing condition, and inability to meet the cost of installation of the smokeless *choolah* and lack of awareness. The ordinary *choolah* that they use emits smoke and pollutes the environment, leading to diseases such as asthma, lung cancer, bronchitis and other respiratory problems. These problems are observed to be more pronounced in Karumkulam where the density of population is much higher.

Table 3.5 Nature of waste disposal

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
Composting	11	81
Burning	71	19
Other measures	18	-
Total	100	100

Significant difference is observed in the manner in which waste is disposed by the households in the two villages (Chi square value - 98.63). In Kanjiramkulam, 81 per cent of households convert waste into compost and use it for agriculture whereas this is done by only 11 per cent of the respondents of Karumkulam. In Karumkulam, the majority of the households (71 per cent) burn it and 18 per cent of them use other means (mainly throwing into the sea) to get rid of the waste from their premises.

In Kanjiramkulam, the disposal of waste seems to be done more efficiently. This is due to

two factors: (i) the respondents were mainly agricultural workers; (ii) they possessed better facilities to make compost as their house plots were relatively larger in size than those in Karumkulam.

Table 3.6 Type of latrine used

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
Pit	2	16
Septic Tank	98	68
Other measures	Nil	16
Total	100	100

The types of latrines used are significantly different in the two study areas. In Karumkulam, 98 per cent of the households use septic tank whereas this facility was used by only 68 per cent in Kanjiramkulam. Nearly one-third of the households in Kanjiramkulam resort to other, less-developed alternatives, including the pit. It is important to note that latrine facilities at Karumkulam are provided by the State through public comfort stations.

In Kanjiramkulam, the shortage of safe drinking water is a major problem. The residents of Karumkulam do not face this problem so severely. However, water logging near the houses pollutes the environment in this village. People in both these areas depend on common wells and public taps. The respondents stated that they travelled less than 500 metres to fetch water for domestic use.

Overcrowding has a major impact on environmental degradation. The degree of overcrowding can best be expressed as the number of persons per room, i.e., the number of persons in the household divided by the number of rooms in the dwelling. Since the total floor area is not properly separated into rooms in many of the houses under study, such estimation becomes difficult. In its report, the Environmental Hygiene Committee, Government of India (1949), suggested that the floor area available in the living room per person should not be less than 50 sq. ft., whereas the optimum is 100 sq. ft. Doors and windows combined should have 40 per cent of the floor area. Overcrowding is estimated by fixing 50 sq. ft. per person as the requirement. Babies aged less than 12 months were not counted and children between 1 to 10 years were counted as half a unit. It was observed that 81 per cent of the households in Karumkulam and 65 per cent of the households in Kanjiramkulam face overcrowding.

However, only less than one-fifth of the sample population considered their environmental factors poor.

The perceptions of the respondents about environmental factors are significantly different between the two *panchayats*. While in Karumkulam, environmental degradation due to waterlogging, overcrowding, and other unhygienic surroundings was keenly felt by its inhabitants, respondents in Kanjiramkulam who reside in unhygienic conditions in overcrowded housing colonies did not seem to consider the problem serious. In fact, 26 per cent of them considered their environment good.

Table 3.7 Respondents' perception of environmental factors

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	15	20
Satisfactory	76	54
Good	9	22
Very Good	-	4
Total	100	100

The perceptions of the inhabitants about their housing conditions also were not as desperate as one would have expected. About one-half of the households considered them satisfactory or even better (Table 3.8).

Table 3.8 Respondents' perception on housing

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	46	51
Satisfactory	39	30
Good	12	14
Very Good	3	5
Total	100	100

Assets

Table 3.9 Size of house plots

Size (in cents)	No. of households	
	Karumkulam	Kanjiramkulam
0 - 5	87	37
5 - 10	4	28
10 - 20	6	18
20 - 30	2	4
> 30	1	13
Total	100	100

The house plots in Karumkulam *panchayat* were significantly smaller in size than those in Kanjiramkulam. Eighty-seven per cent of the households in Karumkulam had their houses in plots smaller than five cents, while the corresponding figure was only 37 per cent in Kanjiramkulam. Thirty-five per cent of the respondents at Kanjiramkulam had house plots larger than 10 cents as against nine per cent in Karumkulam.

Households in Kanjiramkulam showed marked preference for maintaining livestock when compared to the households in Karumkulam (Chi square value: 52.11). While 54 per cent of

households in Kanjiramkulam had some livestock, only seven per cent had any in Karumkulam (Table 3.10). The smaller size of the habitats, higher density of population and lower importance of agriculture in this latter village are among the major reasons for the observed difference.

Table 3.10 Livestock

Category	No. of households	
	Karumkulam	Kanjiramkulam
Families with livestock	7	54
Families without livestock	93	46
Total	100	100

To analyse the ownership of consumer durables in the sample households, an attempt was made to estimate their money value (Table 3.11). A list consisting of 31 items was included in the interview schedule. The approximate money values of these items were estimated by considering their purchase price, age, and present condition.

Table 3.11 Household consumer durables

Value (in Rs)	No. of households	
	Karumkulam	Kanjiramkulam
0 – 2,500	64	46
2,500 – 5,000	16	24
5,000 – 7,500	2	5
7,500 – 10,000	3	8
> 10,000	15	17
Total	100	100

Significant differences were observed in the value of asset holdings as between the two areas (chi square value 8.23). In Karumkulam, 64 per cent of the households had assets of the value of less than Rs 2500 as against only 46 per cent in Karumkulam. The proportion of households possessing consumer durables worth more than Rs 10000 were, however, not much different: 15 per cent in Karumkulam and 17 per cent in Kanjiramkulam.

Table 3.12 Respondents' perception on assets including consumer durables

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	68	71
Satisfactory	27	19
Good	3	10
Very Good	2	-
Total	100	100

No marked difference was observed with respect to perceptions about assets as between the two *panchayats*. Only five per cent of the respondents of Karumkulam and 10 per cent in Kanjiramkulam felt their status with regard to land, livestock, and household consumer durables as good. Sixty-eight per cent of the respondents in Karumkulam and 71 per cent in Kanjiramkulam felt that their status in this regard was extremely low.

Food and Public Distribution Facilities

The patterns of expenditure on food varied between the two *panchayats*. In Kanjiramkulam, more than half the households spent less than Rs 200 per week on food as against 34 per cent in Karumkulam. Ninety-two per cent of the households in Kanjiramkulam spent less than Rs 300 per week on food whereas only 65 per cent households belonged to this category in Karumkulam.

Table 3.13 refers to the expenditure on food alone. In a typical Kerala situation, there are chances of consumption of some home-grown food (coconuts, eggs, and vegetables like curry leaves, drumstick leaves, papaya, etc.) In the case of fisherfolk, a small part of the catch might also be used for household consumption. Obviously, it is difficult to estimate the value of these items. The level of food intake would therefore be higher than what is bought for household consumption.

Table 3.13 Expenditure on food in a week

Expenditure (in Rs)	No. of households	
	Karumkulam	Kanjiramkulam
0 – 100	7	8
100 – 200	27	44
200 – 300	31	40
300 – 400	24	5
400 – 500	8	2
> 500	3	1
Total	100	100

Table 3.14 Possession of ration cards

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
Yes	98	98
No	2	2
Total	100	100

No significant difference is observed among the households with regard to the possession of ration cards. Ninety-eight per cent of the households in both these *panchayats* owned ration cards. Those who did not possess ration cards had their names included in other cards. All eligible persons thus seemed to avail themselves of the facilities of the public distribution system.

Table 3.15 Regularity of using ration cards

lternatives	No. of households	
	Karumkulam	Kanjiramkulam
Regularly use	76	90
Not regularly use	24	10
Total	100	100

Though no significant differences were observed in the ownership of ration cards, the regularity of using the cards to purchase goods distributed through ration shops showed differences. In Kanjiramkulam, 90 per cent of the households regularly used such facilities as against 76 per cent in Karumkulam.

Table 3.16 Dependence on ration shops

Dependence	No. of households	
	Karumkulam	Kanjiramkulam
Entirely	9	34
Partially	91	66
Total	100	100

People of Kanjiramkulam heavily depended on ration shops for purchasing goods sold through them. More than a third of the households here solely depended on ration shops as against nine per cent in Karumkulam. It is felt that the difference is due to the lower purchasing power of the residents in Kanjiramkulam. People of these villages, however, did not pledge their ration cards as security for loans raised, a practice reported from several other rural areas in Kerala.

The expenditure on liquor was significantly higher in Karumkulam than in Kanjiramkulam (Table 3.17). Seventy-seven per cent of the households in Kanjiramkulam and 34 per cent in Karumkulam spent nearly Rs 200 per month on liquor. Those households, which rarely consumed liquor and which did not consume it at all, were also included in this group. In Karumkulam, 24 per cent of the households spent more than Rs 1000 per month on liquor whereas only three per cent of the households did so in Kanjiramkulam. In many households, the average expenditure on food was equal to or less than the expenditure on liquor.

Table 3.17 Monthly expenditure on liquor

Amount spent (in Rs)	No. of households	
	Karumkulam	Kanjiramkulam
0 – 200	34	77
200 – 500	24	13
500 – 1,000	18	7
1,000 – 1,500	10	2
> 1,500	14	1
Total	100	100

Activity Status

The employment levels of the people in both these villages were low. For our analysis, persons employed for five days or more in a week were considered employed and those who worked for less than five days in a week underemployed. Table 3.18 shows that the number of unemployed persons exceeds the sum of employed and underemployed together, and that the problem is more acute in Kanjiramkulam.

Table 3.18 Activity status

Category	No. of persons	
	Karumkulam	Kanjiramkulam
Employed	117	34
Underemployed	56	87
Unemployed	182	206

Employment

Table 3.19 Average Employment Status of Households

Score	No. of households	
	Karumkulam	Kanjiramkulam
0 - 1	18	46
1.01 - 2	23	39
2.01 - 3	36	9
3.01 - 4	8	2
4.01 - 5	4	2
> 5	11	2
Total	100	100

The household-level employment status is estimated by dividing the number of man-days employed in a week by the number of members belonging to the productive age group. Since old-aged and teenaged people are engaged in some occupation for their survival, persons above the age of 15 were considered as the productive age group. In either *panchayat*, employment opportunities were not available on a regular basis. Households with the lowest scores - i.e. below 1 – accounted for 46 per cent of the total in Kanjiramkulam, whereas the figure was only 18 per cent for Karumkulam. Eighty-five per cent of the households of Kanjiramkulam had a score value less than 2.01 whereas they formed only 41 per cent in Karumkulam. Eleven per cent of the households in Karumkulam had the highest score i.e. greater than 5, while the corresponding figure was two per cent for Kanjiramkulam.

This shows that unemployment is more serious in Kanjiramkulam than in Karumkulam despite the fact that the level of education in Karumkulam is lower. Fishing is the most important sector of employment in Karumkulam. In Kanjiramkulam, possibilities of agricultural operations are limited due to the scarcity of water and other necessary inputs.

Table 3.20 Respondents' perception on employment

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	24	41
Satisfactory	68	47
Good	8	11
Very Good	-	1
Total	100	100

Forty-one per cent of the respondents of Kanjiramkulam stated that their employment opportunities were poor as against only 24 per cent in Karumkulam. In fact, 68 per cent of the respondents of Karumkulam reported that their employment facilities were satisfactory while only 47 per cent of the respondents of Kanjiramkulam felt so. It is important to note that though the respondents of both the villages belong mainly to the unorganised sector, more job opportunities exist in Karumkulam on account of its facilities for coast-line fishing.

Education

The educational status of households was calculated assigning the following weightages to different levels of educations: Lower primary-1; upper primary-2; high school-3; SSLC pass-4; college education-5; technical education-6; and other qualifications-7.

Since primary education is observed to be universal in these two villages, this stage has not been assigned any weightage. The aggregate score of a household is divided by the number of members above the age of 10 to arrive at the average educational status of the household (Table 3.21).

Table 3.21 Average educational status of households

Score	No. of households	
	Karumkulam	Kanjiramkulam
0 - 1	40	16
1.01 - 2	43	30
2.01 - 3	7	33
3.01 - 4	6	16
4.01 - 5	3	4
> 5	1	1
Total	100	100

The analysis shows that the educational status of households in Karumkulam is much lower than that in Kanjiramkulam. Forty per cent of the households of Karumkulam had scores equivalent to or less than one, whereas this held true for only 16 per cent of the households in Kanjiramkulam. Households without any education were also included in this group. Eighty-three per cent households in Karumkulam had scores less than 2.01, whereas the figure for

Kanjiramkulam was 46 per cent. Only 10 per cent of the households had scores greater than three in Karumkulam, while 21 per cent had such scores in Kanjiramkulam.

Several respondents were not able to tell the reasons for discontinuing their education; but the views expressed by some of them give the following results:

Table 3.22 Reasons for discontinuing education

Reasons given	No. of persons	
	Karumkulam	Kanjiramkulam
Financial difficulty	106(35.22)	138(51.11)
Physical handicap	2(0.66)	2(0.74)
Lack of interest	108(35.88)	49(18.15)
Continued failure	11(3.65)	22(8.75)
Early marriage	6(1.99)	8(2.96)
Lack of study facilities at home	68(22.59)	51(18.89)
Total	301(100.00)	270(100.00)

In both the villages, the three major reasons are (i) financial difficulty; (ii) lack of facilities and (iii) lack of interest. About 90 per cent of the discontinuance was reported to be on account of these three reasons. Among the people of Kanjiramkulam, financial difficulty was the major reason for discontinuing education (51 per cent). In Karumkulam, both financial difficulty and lack of interest were equally important (35 per cent each). In Kanjiramkulam, only 18 per cent of the people stopped their education due to lack of interest. Inadequate study facilities at home formed a major reason for discontinuation in both the *panchayats*.

The views expressed by the respondents regarding educational facilities are not significantly different in the study areas. Only 16 per cent of the respondents of Karumkulam and 12 per cent in Kanjiramkulam felt that the available facilities were good.

Table 3.23 Respondents' perception on education

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	20	30
Satisfactory	64	58
Good	14	9
Very Good	2	3
Total	100	100

Health and Environment

The World Health Organisation (1948), in the preamble to its constitution, defines health as "a state of complete physical, mental, and social well-being and not merely an absence of diseases or infirmity". This study examines health conditions by considering factors such as

nature of diseases and expenditure incurred for medical care during three months (October to December 1997), disability of individuals, and access to health care facilities (Table 3.24).

Table 3.24 Medical expenditure of households

Amount (in Rs)	No. of households	
	Karumkulam	Kanjiramkulam
0	10	22
1-500	18	28
500-1,000	24	19
1,000-1,500	8	12
1,500-2,000	16	2
2,000-2,500	11	2
> 2,500	13	15
Total	100	100

It was observed that the average medical expenditure was higher in Karumkulam than in Kanjiramkulam. Forty-eight per cent of households in Karumkulam spent more than Rs1000 for medical care whereas only 31 did so in Kanjiramkulam. Families, which did not incur any medical expense during this period, were also more in Kanjiramkulam – 22 per cent, as against 10 per cent in Karumkulam. This indicates better health conditions prevailing in Kanjiramkulam.

There were two permanently disabled persons in each sample group. In Karumkulam, one was a cancer patient and the other a mentally retarded person. In Kanjiramkulam, both the disabled persons were deaf and dumb. These persons completely depended on the other members of their household for survival.

Table 3.25 Sources of medical treatment

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
Primary Health Centre	45	62
District Hospital	3	0
Private Hospital	52	38
Total	100	100

The major source of medical care in Kanjiramkulam is the Primary Health Centre (PHC) in the locality. More than half the population of Karumkulam (52 per cent) depended on private hospitals. The corresponding figure was only 38 per cent for Kanjiramkulam. Heavy dependence on private hospitals may account for the high medical expenditure in Karumkulam. It is observed that the inadequacies of the PHC force the people of this village to go to private clinics. In both the villages, people did not need to travel more than two km to reach the

nearest medical centre. It was reported that most of the childbirths in these villages took place in hospitals and that the necessary immunisation treatment was given to all children.

Table 3.26 Respondents' perception on health facilities

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	20	19
Satisfactory	66	57
Good	13	22
Very Good	1	2
Total	100	100

Only 14per cent of the respondents of Karumkulam and 24per cent in Kanjiramkulam considered their health facilities good. Nearly one-fifth of the respondents felt that the health care facilities available were poor. It was observed that the public health centre in Karumkulam was not properly functioning and that alternatives were also limited. Hospital facilities were more developed in Kanjiramkulam than in Karumkulam. The perceptions of the respondents of the two areas were not, however, significantly different. Though the medical care facilities were more developed in Kanjiramkulam, the people were not satisfied with them.

Expenditure

Table 3.27 Average monthly expenditure

Items	Karumkulam		Kanjiramkulam		't' Value
	Mean (Rs)	Standard Error	Mean (Rs)	Standard Error	
Fuel	171.330	11.090	82.050	8.613	6.36**
Medicine	152.250	18.254	81.300	11.451	3.29**
Education	48.200	14.513	154.200	57.599	1.78*
Recreation	4.450	2.280	0.450	0.319	1.74*
Housing	63.288	3.643	51.006	5.109	1.96*
Clothing	78.791	8.045	80.625	10.005	0.14*

* * 1per cent level highly significant; * 5per cent level significant; Number of households = 100 each.

The average monthly expenditure on selected items (such as fuel, medicine, education, recreation, housing, and clothing) shows that the variations are highly significant with respect to the expenditure on fuel, medicine, and education. The average expenditure on fuel in Karumkulam is twice the figure in Kanjiramkulam (Rs 171.33 and Rs 82.05 respectively). It is important to note that in the coast-line *panchayat*, the availability of domestic sources of fuel (e.g., firewood) is limited.

The underdeveloped health facilities in Karumkulam are reflected in the medical expenditure of this village. The average expenditure here was Rs 152.25, whereas it was Rs 81.30 in Kanjiramkulam. The respondents from Kanjiramkulam spent more on education. The ex-

penditure on education in Kanjiramkulam was three times that in Karumkulam (Rs 154.20 and Rs 48.20 respectively). The expenditure on clothing in both the villages was almost the same (Rs 78.79 and Rs 80.625 in Karumkulam and Kanjiramkulam respectively). The average expenditure on housing in Karumkulam was Rs 63.288 as against Rs 51.006 in Kanjiramkulam. Though the respondents from Karumkulam spent more on recreation than their counterparts from Kanjiramkulam, this was the least significant item for both the villages.

I.Credit facilities

While enquiring whether these households enjoyed credit facilities provided by banks and other financing agencies, we observed that the majority in both the *panchayats* did not enjoy them.

Table 3.28 Details of credit facilities enjoyed

Alternatives	No. of households	
	Karumkulam	Kanjiramkulam
Yes	37	40
No	63	60
Total	100	100

No noticeable difference was seen between the *panchayats*. The households were in need of financial assistance to buy tools and equipment for pursuing their economic activities and to build their houses. The major reason they gave for not availing themselves of the credit facilities was that they did not have sufficient assets to pledge as collateral. In Karumkulam, most of the households did not possess *pattayam* (ownership title) for their land, making it impossible for them to offer land as collateral. Their inability to influence authorities and their lack of awareness regarding credit facilities were also cited as reasons.

Table 3.29 Respondents' perception on credit facilities

Perception level	No. of households	
	Karumkulam	Kanjiramkulam
Poor	70	57
Satisfactory	28	37
Good	1	6
Very Good	1	-
Total	100	100

In both the *panchayats*, respondents felt the inadequacy of credit facilities. Accessibility to such facilities is poor among the respondents, 70 per cent in Karumkulam and 57 per cent in Kanjiramkulam.

The values of the various parameters considered to assess the quality of life at the household-level widely differ as between these villages. Better job opportunities in Karumkulam had

their reflections on the levels of their income and consumption. But higher values of income and consumption are not dependable indicators of their social development reckoned in terms of health, housing, education, and hygiene. Though income is low in Kanjiramkulam, relatively satisfactory housing conditions, and education and health status prevail there. Obviously, several quality of life achievements are not intimately correlated with income; some inherent factors, qualitative in nature and difficult to measure, such as custom, culture, traits and attitude, influence and determine the quality of life at the micro level.

It is quite striking to note that only less than half the households have a perception level of 'poor' with respect to housing, education, health facilities, environmental factor, and employment. Only in the case of assets and credit facilities, the majority of them perceive their situation as 'poor'. People's expectations from the Government, the church, and other agencies of social participation for financial assistance for assets have gone sky high. This world view could be the result of these qualitative factors. The people's attitude and perceptions need to be given more serious attention than ever before in all the discussions and evaluations of the Kerala development experience; particularly in the context of the new People's Planning campaign.

Appendix I to Section III

Poorest of the poor: Some observations

The poorest of the poor households from the survey sample (of 100 households) in each panchayat were identified through the following procedure:

(i) The hundred households in each *panchayat* were divided into two groups – those with per capita food consumption expenditure per month above the average for the total sample and those below the average.

(ii) From the households with below the average expenditure, those with below the average housing scores and those with below the average scores were identified. For Karamkulam, the score is 11.22 and for Kanjiramkulam, it is 14.33.

(iii) Households with below the average score in (ii) were taken and again sub-divided into two by considering educational status. Households with score less than 1.5 were treated as the poorest.

The households thus identified had very low levels of consumption, housing facilities, and education. They were thus considered the poorest of the poor among the samples studied. The important findings of this enquiry were the following:

(i) In Karamkulam, the average per capita consumption expenditure on food per week of the total sample was estimated at Rs 57. Out of the 100 households under study, 50 households' expenditure on food fell below this level. Among them, 33 households failed to maintain the average housing status. The educational levels of 20 households out of these 33 were very poor. These 20 households were identified the poorest of the poor.

(ii) The average per capita expenditure of the sample studied on Kanjiramkulam was estimated at Rs 53. Among them, for 50 households, the expenditure on food was below the average level. Thirty-five of them had poor housing conditions and among them, in 13 households, the educational status was extremely low. These 13 households were considered the poorest of the poor.

(iii) The total number of members of the poorest households in Karumkulam and Kanjiramkulam were 98 and 62 respectively. Not much difference was observed in the average size of the households (4.9 and 4.7 respectively). In both the *panchayats*, about 50 per cent of the population was female.

(iv) In Karumkulam, 43 per cent of the population belonged to the age group of below 15 years (42 out of 98 persons) as against a mere 29 per cent in Kanjiramkulam (18 out of 62 persons).

(v) Among the 56 adults in Karumkulam, 39 per cent were either physically/mentally handicapped or seriously ill and unable to work (22 out of 56 persons). The corresponding percentage was only 18 per cent in Kanjiramkulam (8 out of 44 persons).

(vi) Leprosy, Tuberculosis, Asthma, Arthritis, and skin diseases were the major causes of disability in Karumkulam. In Kanjiramkulam, asthma and arthritis were the major diseases.

(vii) In both the *panchayats*, aged people also worked for a living. People below the age of 15 were not engaged in any sort of income-earning activities. After excluding children (below 15 years) and disabled persons, we found that 58 per cent of the population in Kanjiramkulam and 39 per cent in Karumkulam constituted active workers.

Since these very poor households were selected from a group of poor households, the findings are not found to be remarkably different from those of the original analysis for the whole sample. However, our finding that housing, education, and health conditions are relatively satisfactory in Kanjiramkulam despite the extremely poor conditions of employment assets and income suggests that the quality of life is not determined exclusively or even predominantly by economic status.

4. Case Studies

There may be some hidden aspects related to the gender dimension, which may not have come out in the discussions in the preceding sections, and which need detailed examination. Though there were many female-supported households (in which the women also earn wages and support the family) in the sample, there were only a few female-headed houses. In order to find out if there existed substantial differences between the male-headed (with or without female support) households and female-headed households, we conducted two case studies of the latter.

The two households, one of Mable Mary (Household A) and the other of Kochu Thresia (Household B) of Karumkulam *panchayat* were purposely selected. These households were considered female-headed since the earning member and the key decision-maker in both these houses were women. A comparative profile of the two households is given below.

Table 4.1 Profile of the households

House holds	No. of members	Adults	Children	No. of earning members	Per capita yearly income(Rs)	*Per capita average income(Rs)	
						State	District
House hold A	5	3	2	1	3600	6983	7039
House hold B	5	4	1	1	2650	6983	7039

* Economic Review 1995; (Income of the households computed by the author).

The male heads of these two households had died under tragic circumstances after prolonged illness, incurring huge expenses beyond the means of the households which pushed them into heavy indebtedness. Both died due to alcoholism. Both the households belong to the Latin Catholic community of traditional fishermen. The deceased men had been the sole bread-earners of their households. Table 4.2 shows the extent of present indebtedness of these households:

Table 4.2 Extent of indebtedness (in Rs)

	Indebtedness(Rs)	Annual Rate of interest (%)	Amount repaid (Rs)	Amount due(Rs)
Household A	60,000	25 to 30	36,000	24,000
Household B	40,000	25 to 30	28,000	12,000

The main source of borrowing was private moneylenders. In order to partially repay the debt, the two families had to sell their gold ornaments worth Rs 7000 and Rs 12000 respectively. Some amount was repaid with the assistance received from Matsyafed at the time of the death of the male heads (Rs 5000 each) and the personal savings of their women.

After the death of the male heads, their wives had to take up the responsibilities of looking

after the households. Besides bearing the responsibility of bringing up children, these female heads also had to take up the responsibility of looking after their aged parents. Apart from this, they had to take up the burden of repaying the debts incurred for the medical treatment of their husbands. The husband of Mary Mable (Household A) lived for six years after becoming a cancer patient. He underwent an operation at Medical College Hospital, Thiruvananthapuram and died in 1997. Kochu Thresia's husband expired in 1997 even before his illness was diagnosed. For his medical treatment, she went with him to other parts of the State to meet Ayurveda and Allopathic specialists. The heavy indebtedness has pushed these two households into abysmal poverty, malnutrition, and ill health.

The women heads of the two households have taken to selling fish. They tread long distances to sell fish purchased from fishermen direct or, at times, from middlemen. Being a perishable commodity, the fish purchased in the early hours of the day is to be disposed of at the earliest. For this, the women have to start in the wee-hours of the day, say by 5 a.m., and reach the wholesale fish markets at different parts of the district - Palayam, Neyyattinkara, Vizhinjam or Karumkulam, to buy fish. After buying, they travel to Balaramapuram fish market to sell the fish. Transportation is a big problem.

The Government-owned transport buses do not permit fisherwomen to transport fish in them. So they depend on private vehicle owners for the purpose, who charge exorbitant rates. Often the cost of transportation is so prohibitive that it eats into the meagre profit of the sellers. It is seen that these women have to travel 17 to 20 km per day. On an average, they spend Rs 30 to Rs 50 per day on transportation alone. The profits they earn fluctuate and it is found that the average net profit works out to a meagre Rs 50 per day after meeting transportation costs and the interest paid on working capital borrowed for buying fish from private moneylenders.

Table 4.3 furnishes the information on the cost involved in marketing fish, payments, and net profit per day. The expenses are almost the same for both the households.

Table 4.3 The cost, expenditure, and profit of trade (in Rs)

Purchase Price	Transportation	Other Expenses	Interest paid on borrowing	Total cost	Profit
400	40	20	12	472	40 to 70

Under normal circumstances they earn a profit, though occasionally losses are also incurred on account of market fluctuations. Loss pushes them further into the whirlpool of indebtedness.

Despite great difficulties, these families have managed to acquire some assets to improve their quality of life. Family 'A' managed to repair its house with financial assistance received from the *panchayat* office. The female head received a total amount of Rs 35000 for this purpose in three instalments. She claimed that in order to get this assistance she had to spend Rs 3000 by way of bribe to the officials concerned. This household does not possess any consumer durable worthy of mention.

The house owned by Family B had been constructed during the days when the male head was alive and it is comparatively in a sound state. They own other assets as well such as a tape recorder, two chairs, and one table. The female head has not been able to buy any durable item after the death of her husband.

These widows do not get any financial support from the State. They had applied for widow pension more than a year ago, but it has not been sanctioned. Nor has any non-governmental organisation extended any sort of help to them. Earlier, an NGO entitled Vincent D' Paul Society had given them a monthly pension of Rs 25 each. The Church, after initially supporting these families to some extent, has grown less enthusiastic in their case. All these show that these women have to generate income on their own from an occupation, the fortunes of which are influenced by factors beyond their control. Health hazards, unforeseen expenses on their dependents, educational expenses, loss in their trade - all add to their miseries. Sometimes they face unemployment for long periods when there is no fish to trade. Such situations throw them into the clutches of private moneylenders. Table 4.4 shows the details of the financial assistance received by their households after the death of the male heads.

Table 4.4 Financial assistance received by households A and B

State	Nil
Church	Rs.500/- at the time of death; 3 note books for children at the time of school re-opening
NGOs	Vincent D' Paul Society – Rs.25 per month till Mar. 98
Other sources	Nil

Family ties and social obligations lead to the erosion of their meagre incomes earned of hard work by these women and deprive their wards of education and other socio-cultural facilities. In the case of family 'B', the girl child was forced to drop out from school in order to look after her physically handicapped brother and nurse her grandparents. The earning women also have to meet the expenses of parents who live with them.

Alcoholism, widespread in the area, is mainly responsible for health problems and fatal diseases. The male heads of both these families died due to continuous consumption of spurious liquor and other intoxicant alcoholic drinks available in large quantities in the area. Both the women felt that unless alcoholic drinks were prohibited and awareness programmes organised on a large scale, this social evil would destroy precious lives and aggravate problems of the poor households.

In Kerala, it is often noticed that women who have lost their husbands face some social stigma. In the areas under study, no such problem existed, thanks to the homogeneity of the community. Gender discrimination is not common. In general, women who have to support their families in the absence of husbands do not face gender problems unlike in other areas.

5. Conclusion

This study reveals that the quality of life of the low-income group in Karumkulam and Kanjiramkulam *panchayat* is poor. Though the government expenditure on welfare measures and basic needs is very high in Kerala, the benefits of such measures are not enjoyed to an adequate extent by the poor households of these localities.

The parameters chosen in this study to examine the quality of life are broadly classified into two: income-related and social status-related. Income status depends on employment, assets (such as land, livestock, and household consumption-oriented goods), pension benefits and credit facilities. Social status is influenced by caste, housing, education, health, and environment.

Though Karumkulam and Kanjiramkulam are neighbouring *panchayats*, the income status in Karumkulam is higher than in Kanjiramkulam. This is because the income levels of the households are directly influenced by employment opportunities, which are more available in Karumkulam. Agricultural labourers form the major portion of the workforce in Kanjiramkulam. Employment opportunities in this sector are limited. Alternative sources of employment are scarce.

The social status in Kanjiramkulam is, however, superior to that in Karumkulam. The level of education is higher here and this has a direct impact on cultural values and levels of social awareness. Some of the specific problems common to both these villages are summarised below:

(i) Drinking water facilities are limited in both the *panchayats*. Though running water is available, the supply is irregular. People depend on open wells for washing, drinking, and bathing. It is seen that washing and bathing are done at the well site, leading to the contamination of water. The scarcity of water is more acute in Kanjiramkulam than in Karumkulam. In Kanjiramkulam, water supply through taps is as rare as once or twice a week and community wells are also less in number.

(ii) Electricity facilities are limited, with many houses remaining un-electrified. This problem is more serious in Karumkulam.

(iii) Most labourers do not own the necessary tools and equipment of their economic activity. In the coastline area, the inadequacy of implements is felt as a serious handicap. Since the tools and equipment needed by the agricultural labourers in Kanjiramkulam are not very expensive unlike in the fishing sector, this problem is not so acute there.

(iv) Credit facilities are not adequately available to the households in these areas. The need for credit facilities is felt more strongly by the residents of Karumkulam. Here, people had loan facilities to buy tools and equipment for fishing. But the lack of tools and equipment remains a grave problem.

(v) The level of literacy is not on the whole low. However, it is lower in Karumkulam, while it is higher in Kanjiramkulam (79 per cent and 92 per cent respectively). The dropout rate is higher in Karumkulam. Education at the secondary and the higher levels is low in both the *panchayats*. Though several parents express the desire to see their children educated, many factors stand in the way, the most prominent of which is finance. In Karumkulam, lack of interest also is an important handicap.

The general level of education is higher among women than among men. They mix with other communities and with educated people in their capacity as fish-vendors and housemaids. The activities of men are confined either to the seashore, the deep sea or the farms. Women are, in general, more concerned than men about the education and health of their children.

(vi) Housing facilities are poor, more so in Karumkulam. Many houses do not possess facilities such as separate cooking space, separate enclosure for sleeping and separate latrines and bathrooms. Covered latrines are not available in many houses.

Houses are more densely clustered in Karumkulam and overcrowding is a serious problem there. The expense on maintenance of house structures is relatively high.

(vii) Employment opportunities are larger in Karumkulam. Nearly 90 per cent of the households depend on fishery and related activities. Men go for fishing and women for fish vending. Job opportunities are limited in Kanjiramkulam. Male workers in this area migrate to other parts of the State for employment. Most of the women remain unemployed. The care available for children is inadequate in Karumkulam as women who go for fish vending cannot look after their children properly. Absence of female heads in the family affects the educational and cultural status of the children in this *panchayat* adversely.

(viii) Despite a better overall employment status, asset holdings are poor in Karumkulam. Most households do not possess consumer durables, livestock or other assets. Their hutments are also very small. The situation in Kanjiramkulam is better. Many of the households own land, livestock, and consumer durables.

(ix) Alcoholism and smoking are widespread among fishermen. Both men and women of Karumkulam chew pan with tobacco. The excessive use of intoxicants and alcohol leads to health problems. The consumption of alcohol and other intoxicants is less pronounced in Kanjiramkulam. Apart from other cultural and traditional factors, income level is the major determinant of expenditure on alcohol.

(x) The health conditions are poor in both villages. Owing to unhygienic conditions, overcrowding, waterlogging, and other environmental factors, Karumkulam has become a disease-prone area. Alcoholism and accidents that occur in the course of fishing also have an adverse impact on health. Kanjiramkulam shows a better health status. The average monthly expenditure of the households on medicine in Karumkulam is twice that in Kanjiramkulam.

The common diseases found in Karumkulam are tuberculosis, asthma, scabies, skin diseases, and leprosy. During the rainy season, diarrhoea, dysentery, and viral fever are very common. During summer, chicken pox and measles spread in the area. The medical care facilities in this *panchayat* are inadequate. The primary health centre faces several problems like shortage of medicine, staff, beds, equipment and toilets.

The Pulluvila area is covered under the leprosy eradication programme of the Government. Lepers are periodically examined and they are given medicines free of cost. Though such facilities are not adequately developed, even the available facilities are not being utilised properly.

The residents of Karumkulam have a low level of awareness of health. To them, 'health care' means medical consultation and medication. Lack of awareness is not so serious in Kanjiramkulam except in its *harijan* colony. The average life expectancy in the study area is reported to be low.

Non-governmental organisations have contributed little to overcome these problems in these villages. In Karumkulam, except for some medical camps conducted, the role of the church has also been minimal.

(xi) In both these villages, the beneficiaries of poverty alleviation and self-employment schemes are limited in number and the beneficiaries of assistance receive only small amounts. Widow and old age pensions are not properly disbursed. Since the role played by the church and voluntary organisations is limited in this regard, the local population expects that the State should introduce programmes of significance to the locality.

(xii) The average monthly consumption expenditure in Karumkulam is higher than in Kanjiramkulam. The expenditure pattern highlights the fact that a sizeable portion is being spent on medicine and food. Though the expenditure on food is greater in Karumkulam, the quality of the food consumed is better in Kanjiramkulam.

(xiii) The people of Kanjiramkulam are more aware of their deprivation. Though their education and health status is slightly better, they are dissatisfied with their housing and employment facilities, asset position and welfare schemes. In Karumkulam too, the respondents feel that their environmental conditions are poor. However, their awareness on some of the other variables was perceptibly low.

(xiv) An analysis of the poorest households indicated that no substantial differences exist between them and the rest. The findings of the general survey with reference to the differences in economic and social status are found to be valid in this sub-group also.

(xv) The role of non-governmental organisations in combating the socio-economic problems in this region has not been significant. The Kulas Foundation is a well-established NGO which extends its services to both these villages. Primarily interested in creating job opportunities for poor women, it provides credit facilities to them to run

small business. The loan amount varies from Rs 500 to Rs 5000. The bank rate of interest is charged and the amount is repayable within a period of 10 months. Computer training is given to physically handicapped persons free of cost. This NGO also conducts medical camps and personality development programmes. The office-bearers of this organisation stated that the people of the locality are not interested in utilising these facilities. The villagers seem to be sceptical about these programmes and attempts to make them aware of their utility have not succeeded. But, persons from other parts of the State have made use of these welfare measures.

Swami Vivekananda Arts and Sports Club in Kanjiramkulam is interested in helping poor students by providing them with some incentives. Every year, they donate five books each for a few poor students of the village. Usually 200 to 250 students enjoy these benefits. Apart from this, students who secure the highest marks in the SSLC examination are also given awards. This organisation is also interested in eradicating illiteracy from among the adult population through an informal education programme.

Another NGO, Aruvinayakam Memorial, in Kanjiramkulam runs a reading room and library with financial assistance received from the State Government. The involvement of the local NGOs and introduction of self-employment programmes do help in reducing the socio-economic backwardness of these *panchayats*, but only on a marginal scale.

The study suggests that the policy of formulating programmes at the macro-level for implementation at the micro-level to improve the quality of life has to a large extent failed. The campaign launched in Kerala under the People's Planning Programme during the Ninth Five-Year Plan focuses directly at the grassroots-level situation - the situation at the ward and the *panchayat*-levels.

At the household-level, unemployment is the main cause of deprivation with respect to minimum needs. Low-income levels make it difficult to break the vicious circle of poverty. Nonetheless, there is evidence to suggest that even in situations, in which income levels are low, educational development has a positive impact on attitudes and awareness and makes a significant difference to the quality of life. Quality of life, to a great extent, is influenced and determined by numerous factors other than income and assets.

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