Sub-Marginal Rubber Cultivators: A Study of livelihood issues of beneficiaries of 'Rubber to the Poor' project of Malanad Development Society, Kanjirappally

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English Discussion Paper

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# Sub-Marginal Rubber Cultivators: A Study of livelihood issues of beneficiaries of 'Rubber to the Poor' project of Malanad Development Society, Kanjirappally

P. K. Kurien\*

## **1. Introduction**

Environment and biodiversity became topics of serious discussion in Kerala by the late 1980s. A debate began for the first time since the introduction of extensive cultivation of various cash crops in Kerala, on the wisdom of concentrating on the cultivation of non-food crops, particularly since Kerala is chronically a food-deficit State. The degree of food deficiency in production is progressively increasing in Kerala. All debates have pointed an accusing finger at the invasion of cultivable land in the State by rubber. Rubber has pushed out from cultivation not only food crops but non-food crops as well. Malanad Development Society had organised thousands of marginal and sub-marginal landholders to take to rubber cultivation in the early 1980s. Their holdings, in which rubber was introduced, had been under food crops, fruits, and in some cases, rice. MDS believed that small and marginal farmers were a neglected lot, and that the increasing cost of cultivation and cost of living were pushing them into a very desperate situation. Their sorry plight had a demoralising effect on the farming community as a whole. The small and marginal farming community remained unorganised and therefore were not in a position to put up a collective front to protect their interests. MDS believed that no social development would be justified in keeping away from the farming sector and neglecting the problems of its weaker sections.

The goal of the project termed *Rubber to the Poor* was to extend a helping hand to the smallest landholder to cultivate rubber and earn an additional income, and to help him to develop in social and economics status. Economic development of the beneficiaries was the immediate aim of the project. The project was expected to provide a common and united platform for sharing of experiences and ideas, besides developing socio-economic awareness about the multi-dimensional factors that control human living. Thus economic and cultural development is the ultimate change, which MDS expected to bring about through this project. Looked at from the backdrop of the food crops *vs* cash crops debate, to what extent has the

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project influenced the thousands of families in the locality? This study makes an effort to examine the livelihood issues of the beneficiaries of the *Rubber to the Poor* project through an *ex post* evaluation.

The *Rubber to the Poor* Project (RPP), implemented in collaboration with the Rubber Board, had 4153 beneficiaries. Till the time of this project formulation, farmers cultivating rubber in holdings of less than 50 cents had not been eligible for subsidy from the Rubber Board. The Rubber Board amended this rule during its collaboration with MDS in implementing the project. All who cultivated rubber in holdings of 10 cents and above were brought into the subsidy eligibility net. *Rubber to the Poor* project was the first project during the implementation of which the Rubber Board made amendments to rules to bring in a new segment of cultivators into the subsidy net. The only condition put forward by the Board was that farmers who belonged to this category should organise themselves and that their applications for subsidy should be routed through a Non-Governmental Organisation (NGO). The role of NGO in this case was played by MDS. The Project was implemented in 23 villages spread in the high ranges and low ranges.

The present research is an effort to analyse the livelihood aspects of farmers who cultivated rubber in their sub-marginal holdings under the influence of the *Rubber to the Poor project*.

### **Objectives**

The two major objectives of the study are:

- (i) Documentation of the experience of implementing the *Rubber to the Poor* project.
- (ii) Enquiry into the livelihood aspects of the beneficiaries who had cultivated rubber under the *Rubber to the Poor p*roject.

### Method

Participatory Research Method was adopted to conduct the study. Since documentation of the pre-project situation was not available, the required items of information were collected with tools and techniques of the PRA method. The tools used in this study comprise the following: (i) Historical Time Line and Local History, (ii) Family History / Ethnography, (iii) Venn Diagrams, (iv) Mapping, (v) Wealth Ranking, (vi) Direct Matrix Ranking, (vii) Food Path Analysis, (viii) Farm Profiles, (ix) Seasonality Calendars, (x) Semi-structured Interviews, (xi) Impact and Flow Diagrams

### Definitions

Definitions of some of the terms used in the context of the present study are given below.

Livelihood: Security of stock of food and cash throughout the year and the means to meet contingencies.

Sub-marginal land holdings: Holdings, owned by the inhabitants of the Panackachira resettlement colony, of not more than 25 cents.

*Rubber to the poor*: A project implemented by Malanad Development Society in selected villages under its area of operation between 1982-1984, in which sub-marginal land holders were organised to undertake cultivation of rubber. The project was named so by the late Mr P. K. Narayanan, former Public Relations Officer in the Rubber Board.

Land holdings ranging from 10 to 50 cents in extent were brought under scientific rubber cultivation under the technical guidance of the Rubber Board at the rate of 20 trees per 10 cents of land. Ten cents of land was decided to be the lowest extent of a holding for the purpose of rubber cultivation. Rubber trees would be ready for tapping in 5 years after planting and a plot of 20 trees would potentially yield of 1 to 2 kg of dry rubber. It was hoped that the owner of a holding of 20 trees would be able to do the tapping himself without causing any hindrance to his other normal work.

Cultivators of rubber were selected from a range of landholders having a maximum of 4 acres in the high ranges and two acres in the low ranges. Technical advice and instructions from the Rubber Board were considered binding on the project beneficiaries.

Farmers could join the project by applying in the prescribed form obtained from the parish priest (or the unit supervisor at the MLO level, or the central office of MDS or MDS training centres) with an application fee of Rs 5.

After ascertaining the extent of land of each applicant through chain survey, local supervisors of MDS (MLOs) gave applicants instructions for digging of pit to plant rubber. The costs of these works were to be borne by the beneficiary himself. MDS assured supply of planting material such as RRI- 105 and GT1 from approved nurseries. Together with the planting material, fertilisers, copper sulphate, and calcium carbonate were also given. The farmers initially paid one-third of the price of these materials. The balance two-thirds was considered a loan to be repaid in 12 equal monthly instalments. Only one applicant was permitted from a household. The maximum loan amount <sup>5</sup> was limited to Rs 500. Implements such as sprayer were supplied to the MLOs. Training was given to MDS Unit secretaries and supervisors in the production and processing of rubber partly at the Rubber Board and partly at MDS Centre, Parathode.

The earlier experiences of MDS and sister concerns in implementing several micro- and locale-specific projects were of help in organising the project.<sup>6</sup> If rubber is cultivated in 25 cents of land, the owner is assured of a steady and sustained income for a fairly long period of time; MDS believed that expenditure on education, house construction, and marriage of children, the anxiety about which keeps marginal and sub-margianl farmers on tenterhooks, could also be met from income from such a holding.

*Rubber to the Poor* project was also envisaged as an opportunity for the small and marginal to farmers of a locality to come together and share ideas, concerns, and experiences. Cultivation, harvesting, processing, and marketing on a collective basis were also among its objec-

tives. B. H. Misereor  $e.v^7$ , Rubber Board, and Catholic Relief Services <sup>8</sup> joined hands to assist the project.

Though the project was termed *Rubber to the Poor*, there were beneficiaries who had landholdings up to two acres. However, as far as the present study is concerned, only those farmers who cultivated rubber in holdings of 25 cents of land or less are considered. Beneficiaries of *Rubber to the Poor* project may be classified based on the size of their landholdings into four categories.

Table 1.1	Classification of beneficiaries under Rubber to the Poor project based on
	the size of landholdings

10 to 25 cents	26 to 50 cents	51 to 100 cents	101 to 200 cents
15 %	13%	32%	40%

The beneficiaries of the *Rubber to the Poor* project may be classified into five categories based on their economic status: Very Poor, Poor, Middle, Higher Middle, and Rich. The categories are based on perceptions of the people of Panackachira resettlement colony and not on any objective criteria.

The study was conducted with special reference to the Panackachira resettlement colony in XII ward of Mundakayam *panchayat*. The colony has two portions; (i) the lower portion, to the left of Mundakayam-Koruthode road, called the *One Acre* Colony and is an extension of the 504 Colony formed by Government of Kerala to settle 504 Scheduled Caste families. Nearly 150 families who are part of 504 Colony were allotted land in this portion. The original landholders in the lower Panackachira colony have one acre of land each, (ii) the upper portion has inhabitants who have 25 cents of land each. Only the upper portion of the colony was chosen for the study.

No attempt to study systematically their impact has yet been made though several projects such as the *Rubber to the Poor* have been implemented by Malanad Development Society. The present exercise is an effort to fill this lacuna. More than 4000 beneficiaries were involved in the project.

The study is expected to give an insight into the extent to which the project has made an improvement to their living. The study is also expected to give insights into the replicability of such projects. MDS would also benefit from the study by gaining insights into determination of its priorities in development and social action. Larger questions concerning the economy of Kerala have also to be addressed. Despite the fact that Kerala is endowed with favourable climatic and ecological factors for cultivation of food grains, the State remains chronically deficit in food. Unfortunately, the trend in agricultural production in Kerala is to go more towards cash crops than to food crops. How do a project such as *Rubber to the Poor* in particular and the rubber crop in general contributes to this situation? Is rubber inevitable as a steady source of income for the marginal landholdings? The study is expected to give insights into these questions as well. The Government, Farmers, and NGOs would all be the end users of the information and the insights this study would generate.

The report is organised in the following order. Section II provides background information on the NGO (MDS) and its involvement in Panackachira re-settlement colony. The different development stages that the NGO has gone through are also traced in this section, besides providing a historical overview of the study area. Section III has presented in brief the agricultural scenario of Kerala, with special focus on rubber cultivation. The experiences of rubber cultivators in general, and in Panackachira in particular are discussed in Section IV. In Section V, a summary of the discussions and the conclusions, which emerge, together with a few recommendations, are furnished.

This study has a few limitations. It is conducted using information collected through participatory research <sup>8A</sup> and related techniques. No survey of any sort has been employed for field investigation. Since no systematic information was available on the pre-project situation of the study area, the situation was reconstructed using historical time line and local history. The perceptions of the people have been incorporated in the report to the extent possible. Further, this exercise was envisaged as an *ex post* evaluation of a development project implemented by the NGO (MDS) and was not formulated to verify any specific hypothesis or testing any theory. Oral information cannot be supported with documentary evidence. Theory testing or theory modification is not attempted in the study.

## 2. Panackachira Colony and the Involvement of MDS

The study area falls in Mundakayam *panchayat* of Kanjirapally *taluk* in Kottayam district. It is a resettlement colony forming largely the  $12^{th}$  ward of the *panchayat*. Panackachira, situated about 8 km from Mundakayam on the Koruthode road, in the foothills of the high ranges, was once part of the Sabarimala (Sabari hills). The Panackachira colony can be divided into two parts: the lower part, to the left, and the upper part to the right, of Mundakayam-Koruthode road. The upper part of the colony is also called *Kaal acre colony* (*Kaal* means one-fourth; the residents were given 25 cents – one-fourth of an acre – each and hence the name).







Figure 2.2 Map adopted from the Development report of Mundakayam Panchaya

Panackachira was declared as a colony under the *Integrated Harijan Development Project* (IHDP) by the Government of Kerala. The colony had 613 households. Of them, 36 per cent belonged to Scheduled Castes (both Hindus and Christians); 9 per cent to Muslims, and 5 per cent to forward communities (37 per cent Hindus and 18 Christians).

Panackachira resettlement colony was established in 1971 to rehabilitate the people who were residing on the road and river *porambokes*.<sup>10</sup>

The Mundakayam region, which has extensive rubber plantations, offers employment opportunities to large numbers. People from different parts of south and central Travancore used to come to Mundakayam in search of employment. Mundakayam, just a panchayat town, is one of the prominent gateways to the high ranges of Kerala. It is perhaps this influx of people that led to the coining of the saying in the local language, Mudinjavanu Mundakayam<sup>"11</sup> (Mundakayam is for the ruined). A large part of the in-migrants came as labour recruited for employment in rubber estates. Kankanis (supervisors) played an important role in recruiting labourers. There was a system during the colonial period for branding the estate workers. A seal was placed on the forearm of the worker to identify him/her as an estate worker<sup>12</sup>. If the employees are selected to do labour on a particular day, they will be sealed accordingly. They shall maintain the seal and show it in the evening to collect wages. This was locally known as *perattu*<sup>13</sup>. Most often wages were paid in kind, either in rice or wheat. The hours of work were usually from 6 am to 6 pm. Pappen *maistry* recollected thus: "people used to go to work with country torches made of dried coconut leaves in hand. The work began by daybreak and continued till dusk. The kankanis used to manhandle the workers by way of punishment. Workers seldom resisted such ill-treatment for fear of loss of job. There was no security of jobs. Substantial numbers of workers lived on the road porambokes and worked in the estates on temporary basis. When there was no work in the estates, they would do odd jobs outside to earn a livelihood. Thus, there existed a strong relationship between the estates and the *poramboke* dwellers<sup>14</sup>.

Forests had constituted for ages a source of work and income. Both selection and clear felling began in the forests not very far from Mundakayam for starting rubber plantations. Thus people came in increasing numbers to work in the estates and the forest. However, being a small *panchayat*, Mundakayam did not have, for long, adequate housing facilities to shelter the rising tide of people. The occupants of the *poramboke* were too poor to buy land and construct buildings. Estates provided them with lots of employment opportunities during their initial planting and development stage. Once the trees became mature and began to yield, employment opportunities dwindled. The level of employment remained low during the entire yielding period of the trees, which extended for about 25 to 30 years. Another stage of hyper-activity in the estates began only when replanting commenced again. Thus, large number of people congregated at Mundakayam due to the fact that it became a plantation centre. Not all those who came could afford, nor had places to go back to during periods of lean employment. Therefore, people stayed on seeking and doing odd and casual jobs. By the late 1960s, there were around 600 families living in the *porambokes* of roads and rivers, largely in the *panachayats* of Mundakayam, Parathode, Koottickal, and Peruvananthanam. The majority of these *poramboke* dwellers were congregated in Mundakayam town.

Initially there were only a few tenements on the roadside. Their number gradually increased. *Kankanis*, plantation owners, and even rich farmers encouraged the landless and the homeless to encroach upon the *poramboke* land and settle down there. The presence of people on the *poramboke* provided an assured supply of labour. However, life on *porambokes* was not trouble-free for the occupants. Mundakayam *panchayat*, for instance, made repeated attempts to evict the *poramboke* occupants. Efforts to evict these families at the *panchayat* level were forcefully objected to by the *poramboke* occupants. The occupants some of the tenements on the river *poramboke* whose huts had been washed off by flood water in 1957 were resettled in EMS colony at Mundakayam. Though people who had initially occupied the river *poramboke* were resettled elsewhere, fresh occupants came to exploit the vacated space. The living conditions were unhygienic and people lived in squalor and dirt and in misfortune that landed them on the roadside. Social problems and vehicle accidents that snatched away tenements and even human lives were rampant.

The indiscriminate increase in the number of *poramboke* occupants became a serious local problem, which was too large to be neglected. The occupants of the *poramboke* were socially alienated. Since they did not have hopes for a better future, they were unconcerned with the rules and regulations of a civil society. Strikes and *dharnas* were organised by them and on their behalf in support of their claim for a plot of land and a house each. The demand to resettle the *poramboke* dwellers dates back to the early 1960s.

The Mundakayam *panchayat* decided to evict all illegal *poramboke* occupants with a view to resettling them on other suitable locations. In the process, some families were shifted from the heart of the town to Varickani, where the *panchayat* owned some land. Yet not all the families could be shifted from the town. Some government land was available at Panackachira. The public demanded that this land may be set apart for resettling the *poramboke* dwellers. "There was a move to plant teak at Panackachira in 1968. Hearing this, hundreds of people from Mundakayam marched to Panackachira on 18 May 1968. They laid siege to the land at Panackachira. This strike was called off following an assurance from the Government to give up its proposal to plant teak".<sup>18</sup> 'Mundakayam Development Committee (MDC) consisting of representatives of political parties and socio-cultural organisations were formed. Representatives of MDC visited Thiruvananthapuram several times to plead with the Government of Kerala to allot land for the *poramboke* occupants in Mundakayam so that they could be moved to a location outside the town.

The then Revenue Minister, K. T. Jacob, offered at a conference of officials and *panchayat* members held at Kottayam, to provide 150 acres of land at Panackachira to resettle the *poramboke* occupants. It was decided to distribute this land among approximately 600 families. The land was officially set aside for the *poramboke* occupants in 1969. However, the eviction of the *poramboke* occupants could be realised only in 1971. The Mundakayam *panchayat* gave each evicted family, at the time of eviction, a sum of Rs 50; the Government of Kerala also provided an equal amount to each family. "The eviction took place in the sizzling hot summer of 1971. It was a mass exodus. Social activists, *panchayat* members, government officials, and police constables were present. Tenements were dismantled one by one and were deposited in trucks. Belongings of one or two families were put together in the truck and moved to Panackachira - 8 km from Mundakayam. It was a moving sight. It was

the period when the refugee influx from the former East Pakistan had caused problems of massive magnitude for Government of India. There was lot of resemblance. Panackachira was, in this context, named aptly *Bangladesh* colony. The days immediately after eviction were miserable. The land allotted was of steep slope and was extremely difficult to negotiate even for the healthy. The land allotted was under dense secondary forests, consisting mainly of lemon grass and eupatorium. The people first stayed on the Mundakayam-Koruthode roadside. Within two to three months, they moved to the plots allotted to them after putting up huts in them.<sup>20</sup>

There were no employment opportunities available in the area. Workers had to go on foot to Mundakayam where there was at least some hope of finding some odd jobs, and that too only once in a while. Fuel, fodder, and water were very scarce in the colony. The inhabitants in the colony had to depend on the nearby TR & T Rubber Estate and the teak plantation of the Forest Department for meeting this purpose. The going was extremely tough. The Muslim families in the colony were frustrated, as they had no mosque to offer prayers. Several families sold off or gave up their allotted plots and left the colony. Babu Thomas Kalapurackal reflects about his Panackachira days: "Panackachira was a stigma. It was a brand name for something that the society hated most. The very fact that a person is from Panackachira was reason enough for people to deny him/her employment. People of Panackachira had inevitably to resort to unacceptable professions to earn a livelihood. This stigma was so powerful that people who travelled in bus from Mundakayam to Koruthode would not name Panackachira as their destination; instead, they would take a ticket and get down stealthily at Panackachira. No decently dressed person would say that he is going to Panackachira. People travelling to Koruthode would stare if some one decently dressed, got down from the bus at Panackachira. The people of Panackachira were not at all accepted by the society. They were treated as social outcasts." Babu Thomas remembers how embarrassing it was for him to be looked down upon by people, just for the reason that he talked to persons living in Panackachira. Those who returned by bus after work from areas beyond Panackachira witnessed shoutings, abuses, physical fights, and drinking bouts in the evenings on an every day basis<sup>"21</sup>.

The people settled on the land in Panackachira cultivated a host of crops such as tapioca, sweet potato, banana, grams, dry land rice, pulses (*thuvara*), colocacea, diosporea, amorphophallus, other tuber crops, and vegetables. Thus the land gave them a host of food materials in the very first year of occupation. This is the first stage in the agrarian history of the colony. At the second stage, several crops which had value as cash-cum-food crops were cultivated by a few. The crops included coconut, arecanut, coffee, ginger, turmeric, pepper, cashew, bread fruit, pineapple, jack, and mango.

The houses at Panackachira colony became dilapidated tenements by 1977, hardly six years after founding the colony. This was only natural since the houses were makeshift huts with roofs made of assorted flimsy materials and walls of thatch. Stray dogs often ate away the food and food materials kept in the houses while their occupants were away on work.<sup>22</sup>

Moved by the miserable living conditions of the Panackachira settlers, MDS and Medical Mission Sisters (MMS)<sup>23</sup> decided to take up community development work in Panackachira

colony in 1977. Thus a community centre was established. Sr. Sophy, Sr. Treesa, and Sr. Molly came to stay with the community. MDS appointed Mr Babu Thomas as community animator. The group formed the Panackachira Community Animation Team (PCAT); they began work in Panackachira from 6 January 1977.

"The PCAT got into rapport building with the community. It went around visiting families in Panackachira. There would not be anyone except children and aged people during daytime in the houses. Several of the aged persons were found sick. Primary medical facilities were arranged, medicines procured, and kept ready for use at the Snehanikethan community centre. The people who were in dire medical need could come and collect medicines from the community centre. Snehanikethan became a focal point for the Panackachira community in its struggle for survival. Housing and other projects were implemented in the years which immediately followed the establishment of the Snehanikethan."<sup>24</sup>

With no regular work, it was difficult for the people to procure food. Those were the days when the PL-480 agreement was in force. The Catholic Relief Services (CRS) supplied food materials such as wheat, CSM, bulgar, oil, and milk powder. Though highly nutritious, the occupants of the colony found the articles unpalatable. Their preference was for rice, tapioca, and fish. So the food materials supplied through CRS were sold in the market and food materials of their preference were bought instead. There was a local trader who brokered these food items out of Panackachira. Babu Thomas remembers that there would be petty traders and others from Mundakayam waiting with sacks and vehicles on days when the food materials used to be distributed among the settlers.

The people reported housing as their first and foremost need. Some concerted efforts to draw the attention of the government to this need began in 1978. The local MLA, *panchayat* members, and leaders of several socio-cultural organisations joined hands in such efforts; the government agreed to intervene and sanctioned a housing programme under which 300 houses in Panackachira would be given financial support for providing roofing tiles and timber. House allottees were decided by lot. Preference was given to families headed by widows and which had infants and chronically ill persons. A house construction committee of nominated members was formed with the consent of the government with Fr. Mathew Vadakkemuriyil <sup>25</sup> as convenor. Houses were constructed in batches of 100.

The people of Panackachira colony actively participated in the implementation of the programme. Groups of 30 families were formed. There were 12 such groups. Each group elected two leaders. The grouping of houses was done by the PCAT. The programme was completed in 1981. By the same year, Mundakayam-Koruthode road had become asphalt-surfaced. More buses started operating on this route. Transportation of men and material to and from Panackachira became easier. All the houses were soon electrified under the rural electrification scheme. The completion of the houses in 1981 is considered a milestone in the history of the colony. This had suddenly enhanced the self-esteem of the settlers. During the initial days of settlement, the struggle for survival was so severe that several persons left the colony for good. Once the housing programme was completed, Panackachira got a sort of acceptance in the society. It was no longer associated with things that people detested. Unoccupied land was still available in Panackachira as some persons had sold off their allotted lands and left the locality. People began in-migrating to Panackachira. The in-migrants and the earlier settlers developed mutual regard. A community sense began to emerge. A *Mahila Samajam*, which had begun functioning at Panackachira, was popular among women and children. The *Samajam* held regular health education classes, the attendance in which was made a condition for becoming eligible for food materials distributed by the CRS Food programme. "The Health Inspector from Erumely Primary Health Centre visited Panackachira in 1983. He interacted with the women in their meetings. He was so surprised by the insightful answers given by the women that he conceded, *you know enough things to teach me*. The basic health lessons had done immense good to the people, especially women and children"<sup>26</sup>. Employment-training programmes such as tailoring, bamboo-weaving, and cane crafts brought self-confidence to women. The animation team, which lived in the community, held frequent interactions with the community and conducted counselling sessions for men and women. All these had a great humanising effect on the people of Panackachira.

There are three phases in the struggle of Panackachira community. V. P. Vijayan and M. C. Janardhanan provided leadership to the people in the colony at the initial stages. A Government Lower Primary school was established during this stage. Sr. Gabriel from MMT<sup>27</sup> Hospital, Mundakayam used to visit the colony and offer medicines and other facilities to the people during this stage. Mr Benjamin John, who joined the Panackachira community as community organiser, began residing in the colony on a full time basis, and providing leadership to the efforts of the local people, also during this stage.

The second stage began in 1977 when the Snehanikethan community centre was established. The PCAT began to reside with the community. Houses were constructed. There was active community participation in the development activities. Young persons like Mohandas (Appachan), Sali, Kiran, and Shaji assumed leadership roles. Houses were electrified. Regular and continuous communication between Panackachira community and MDS was maintained. Once the housing programme was completed, MDS introduced the *Rubber to the Poor* project. MDS involvement at Panackachira was the maximum during this stage. MDS introduced the project as a sequel to the housing programme. Several other community development interventions were initiated simultaneously. Such programmes included sanitary latrine, dairy development, drinking water, self-employment for women, health workers' training, health education, health survey, medical camps, immunisation and vaccination, agricultural development, community-based rehabilitation, nursery school, and credit union.

Camps of the National Service Scheme (NSS),<sup>28</sup> seminars on education, awareness programmes, film shows, and street dramas were also undertaken at Panackachira. All these awareness and development programmes, and the poor economic situation of the settlers provided Panackachira with the appropriate environment for further socio-economic development interventions.

The third stage is characterised by MDS taking a rather backseat role. The Snehanikethan community of Medical Mission Sisters was about to wind up their involvement. Sr. Sophy was transferred elsewhere. Efforts were on to recruit local women to lead the process taking it over from Snehanikethan. Panackachira Development Society was organised. The community water supply project was nearing completion. A few self-help groups (SHGs), which

had emerged, were struggling for survival. Women were getting new opportunities through SHGs. Still, ambiguity regarding leadership and leadership roles remained. Unfortunately, acute political and caste division had also emerged.

### Development interventions and NGO roles with special focus on MDS

Voluntarism and development interventions go hand in hand in any modern society. Non-Governmental Organisations (NGOs) are taking up large number of activities which earlier belonged to the Government / State. As the gap between the demand for development interventions and the capability of governments to rise up to the ever-increasing volume of demand widened, volunteer agencies emerged to fill the gap. Pluralists <sup>29</sup> consider NGOs and voluntary movements extensions of the sovereign authority of the state. Though performing functions that fall in the governmental domain, they retain their independent character and identify with the people.

The history of voluntary development organisations in India <sup>30</sup> may be traced to the nineteenth century. The first half of that century witnessed voluntary movements, which fought against social evils like untouchability, child marriage, and *sati* sought to bring about social reforms. Raja Ram Mohan Roy was in the forefront of the movement. The second half of century was characterised by the birth and gradual rise of the nationalist movement. There came up associations of literary, educational, and scientific activities. The Societies Registration Act, 1860 was passed by the British Indian Government to legalise volunteer associations and organisations. The next phase is the pre-independence era for which Mahatma Gandhi provided dynamic leadership. He combined social action effectively with political struggle. In the period immediately following Independence, Government of India promoted the Gandhian ideology of voluntary organisations and initiatives. Relief and rehabilitation work together with welfare activities have dominated this initial phase, which came to a close by the late 1960s. Since the early 1970s voluntary initiatives have registered unprecedently high rates of growth. Health care, agriculture, drinking water, and energy have attracted the services of voluntary agencies during this period. This period also witnessed the 'total liberation struggle' led by Jayaprakash Narayan. Social activism became popular. Voluntary activities in India became increasingly diversified as initiatives in areas relating to gender, environment, consumer interests, and legal aid were launched throughout the country. Voluntary organisations have mushroomed during this period.

The typology of voluntary initiatives and organisations in India marks six development stages.

### Development stage of relief and charity

The first is a stage at which the work of voluntary organisations is mostly of a charitable and humanitarian type. They address problems of hunger and shelter. At this stage, people constitute the subjects and the recipients of aid and assistance. The voluntary activities themselves are of a reactive type. They respond to problems and aid or assistance is given by way of a reaction to an emergent need or problem. People need help in times of natural calamities and disasters. The activities of Malanad Development Society had also passed through this stage. MDS had undertaken the food and nutrition programme under assistance from Catholic Relief Services (CRS). Relief was provided to people of High Ranges during floods, landslides, and cyclones, which caused loss of property or damage to houses. MDS intervention at Panackachira in the early years may be considered to fall in this category.

### Development stage marked by income generation programmes

People cannot be assisted throughout all their needs; the economic aspect of development therefore becomes dominant in the thinking of NGOs. Training programmes for employment is an important component here. This development stage is characterised by NGOs launching income-generation programmes. MDS has also passed through this stage and initiated several income-generation programmes for people. Examples are *Rubber to the Poor*, sericulture, coffee and cardamom cultivation, dairying and goat-rearing programmes.

### Social progress and institution building

The third stage of development is that of social progress and institution-building. NGOs build institutions during this stage to offer training support to people. Institutions relating to health, education, sanitation, and housing as well as infrastructure are built during this stage. The NGOs more or less follow the institutional approach to development and provide a wide range of social services to people. Institutions are measured by their size and style rather than by their quality. Here institution building is the focus. Individuals in need come to the institutions concerned for training and other help. Institutions become a sort of end in themselves. If individuals are closer to the institution, the better for them for receiving the benefits. MDS established a training centre and built basic infrastructure to provide training in various activities and areas. The MDS training centre became functional from the late 1970s.

### Integration

The fourth stage of development is the stage of integration when a realisation comes that the processes of development should be integrated and not remain compartmentalised. A development programme aims at the re-integration of people into society and to reshape the masses in the image of the elites and the rich. At this stage, the thinking might be that development is a gift given to the poor from above. The Integrated Rural Development Programme (IRDP) in India is an example of this thinking. MDS introduced Integrated Development Programme (IDP) to integrate the development efforts at the micro level. This was attempted in the second half of the 1980s.

### Self-help promotion

Liberation and self-help promotion (SHP) marks the fifth stage. The human aspect becomes more important than economical or the technological aspects. It is now realised that the developmental process must begin from the level of the ordinary people and that whatever development should take place with people's consent. The yardstick of development is the development of the man at the bottom of society. A bottom-up approach comes to be accepted and adopted instead of the top-down approach followed earlier. MDS has begun to think in this direction lately and are promoting self-help groups.

### Dialogue with the poor and participatory development

The sixth stage of development is characterised by dialogue with people, especially the poor. Participatory development is the focus at this stage. The product or project approach to development happens to be given up here. A process is initiated instead. Scope for learning for mutual benefit through interaction between the advantaged and the disadvantaged is emphasised. The advantaged learn from the real life situations of the disadvantaged. Developed societies begin to learn from the experience of poor societies and the marginalised people. Indigenous technical knowledge (ITK) gets recognised and respected. The renewed interest in tribal civilizations and their medicines is a case in point. Development is seen integrally with environmental ethics. Alternatives in farming, health, education, technology, and energy are experimented. A desire for change and a new perspective on development unfolds. Concepts like fair trade, eco-products, and sustainable development come to the fore; and tools of PRA, PLA/POA <sup>31</sup> are accepted in designing and implementing the developmental process.

MDS has gone through these different development stages during the past two decades. Of these, *Rubber to the Poor* project was planned and implemented as an income-generation activity during the second development stage of MDS in the early 1980s.

A Venn diagramm<sup>31A</sup> was prepared by the Community Research Team during the present study (Figure 2.1). Participants in the exercise have tried to pictorially present all institutions to which the people of Panackachira are related in one way or the other. These institutions, as they appear in the picture, vary in size. Some are large and others small. Similarly some institutions are presented at the margins or corners, indicating the frequency of their relationship with the people. Thus ration shop, hospital, forest, Snehanikethan, TR & T Estate and the government upper primary school are larger than others. Each institution has a functional relationship with Panackachira resettlement colony.

Social leadership is provided by Snehanikethan. It has stood with the people during the past 23 years providing them with all sorts of support. The TR & T Estate provides fodder and fuel for the residents of the resettlement colony. Forest provides employment, fodder, and fuel. Health institutions take care of the health needs of the people. Provisions for the colony are brought largely from outside and the services of the ration shop and the market are important institution for the consumption requirements of the colony.

No local institution has yet emerged to take over the responsibilities of MDS and Snehanikethan. Recruitment and development of committed, unbiased and non-partisan local leadership is the greatest need of the community at Panackachira. This problem assumes importance as Snehanikethan community itself is planning to withdraw from Panackachira in a phased manner. A historical analysis of the social scenario at Panackachira reveals that volunteerism and services of local institutions were much larger during the initial years marked by the struggle for sheer survival. Such institutions and efforts seem to be on the wane. Fresh efforts are required in this direction. The emerging self-help groups seem to possess the potential of an effective alternative.





# 3. Evolution of rubber cultivation in Kanjirapally: An overview

### Introduction to cash crops in Kerala

Crops raised for sale constitute cash crops. Von Braun and Kennedy opine that "It is the commercial orientation of the crop, be it a food or a non-food crop that identifies it as a cash crop. An export crop is a particular type of cash crop, one that is ultimately exported from a country."<sup>32</sup> Cash crop markets (for both households and countries) are unstable (Thirwall and Bergevin, 1985). Countries that expanded their exports have also tended to enjoy rapid economic development. Cash crops have better short-term comparative advantage than non-cash crops. For households, the introduction of a cash crop brings an increase in income, both gross and net, and allowing for the value of subsistence production, at least in the short run.

There is some amount of instability attached to cash crops. At the household level, the instability may be associated with production risk or market risk, Thus Sen (1981: p. 126) notes that compared with the farmer or the pastoralist who lives on what he grows and is thus vulnerable only to variations of his own output, the grower of cash crops or the pastoralist heavily dependent on animal products, is vulnerable both to output fluctuations and to shifts in marketability of commodities and exchange rates.

There is a close relationship between cash crops and inequality in the distribution of wealth, income, access, and power. The gainers are said to be the rich, the landed, the male, and the urban as well as the foreign. The losers are said to be the poor, the landless, the female and the rural. In an international context it is the developing countries that become the loser. The argument against cash crops is not necessarily that they cause initial maldistribution, but rather that they act as a mechanism whereby initial disparities are worsened. The existing literature provides evidence of the association between cash cropping and maldistribution at various levels of analysis. At the household level, it is gender relations that are in focus. Households cannot be treated as undifferentiated units; women lack access to resources, credit, and education. Their position is deteriorating in terms of income, work, dependence, and access to land. Such deterioration is said to be associated with cash cropping, brought about through transformation of the peasant household.

At the village level, critics of cash crops draw attention to the association between a buoyant cash crop sector and a series of negative developments for poor families. These include exclusion from the best land, dispossession from land altogether, loss of employment, worsening of seasonal distribution of unemployment, and deterioration of real wages. Sometimes the gainers from worsening distribution are large indigenous farmers; in other cases they are plantations owned by foreign companies or national capital. Kulirani (1983) shows how the introduction of cash crops by the British into Wayanad in Kerala had detrimental effects on tribesfolk in terms of access to land and traditional occupations. <sup>33</sup>

Cash cropping is said to cause inequality in three main inter-related ways. Taking first a narrow view, the benefits of cash cropping are said to be inequitably distributed by virtue of the fact that adoption is uneven. 'Adopters', particularly early adopters, tend to belong to

favoured groups and benefit in the short term because growing of cash crops leads to increase in income. Inequality is said to worsen over time and may result in the poor becoming worse off.

Twose argues (1984) that large cash crop producers are able to expel small farmers in a process of competition; this leads to loss of usufructs in land, dispossession, exploitation of marginal lands or emigration from rural areas.

### Cash crops and food security

Critics portray cash crops as the enemy of food security. At both the household and the national levels, they argue that sales of agricultural output undermine access to food. A commonly cited example is the growth of agricultural exports during the food crisis in Africa. According to Lappe and Collins (1977: p. 194), the world's hungry people are being thrown into even more direct competition with the *'well fed'* and the *'over fed'*. The fact that food is grown in abundance right where they live, that their own country's natural and financial resources were consumed in producing it, or even that they themselves toiled to grow it will no longer mean that they will be likely to eat it. Rather it will go to an emerging global supermarket where every one in the world, poor or rich, must reach for it on the same shelf.

Similarly, there is close connection between cash cropping and the environment. Cash cropping leads to soil erosion, desertification, water pollution and salination. Cash cropping encourages the use of modern inputs such as pesticides, which cause problems for the environment, workers and consumers. Cash cropping may reinforce existing patterns of dependency and create new ones; but cash crop producers may have more room for manoeuvre than is sometimes allowed.

The main value of cash cropping lies not in short-term income gains but in long-term surplus generation and growth through linkages. Cash crops may have a distributional consequence. Cash crop policy needs to be closely related to food policy. The expansion of cash crops is likely to lead to a decline in nutritional standards unless food systems are developed to provide adequate supplies of food at appropriate prices throughout the year.

### Rubber as a cash crop in Kerala

Kerala's economy is largely agrarian and is cash crop-oriented. Most prominent of the cash crops are rubber, coconut, cashew, pepper, ginger, tea, and cardamom. Kerala produces 94 per cent of the rubber, 93 per cent of pepper, 60 per cent of cardamom, and 53 per cent of ginger produced in India. Of these, rubber, tea, cardamom, and coffee began to be cultivated as plantation crops. Bernard O'Binns defines a plantation crops as a "large centrally operated estate, which is usually monocultured and is operated by hired workers." <sup>34</sup> Traditional plantation crops of Kerala are coconut, pepper, cashew, and cardamom. New plantation crops introduced in Kerala from the second half of the nineteenth century, i.e., tea, coffee, and rubber. These new plantation crops depend on in-migrant labour and capital and are produced generally for distant markets.

The agricultural scenario of Kerala is such that it can best be described as an import-export arrangement in which food materials are imported and plantation crops are exported. It must be mentioned at the same time that the plantation crops are largely un-processed or processed only to a minimum extent. Kerala exchanges unfinished products of cash crops for finished products of food crops.

Most of the cash crops are cultivated as mono crops. In consequence, the cultivated lands became progressively denuded resulting in increasing soil erosion and reduction of the water retention capability of the soil. The total biomass of an area is reduced, resulting in scarcity of fuel wood, fodder, and building materials. With the adoption of cash crops, the emphasis shifted from food crops to non-food crops, resulting in rising dependency on import of food materials. Whenever cash crops are processed, bulk of such processing operations is done largely outside Kerala. Coconut provides a classic example. Value addition process exists little or not at all in the State. Therefore, producers often fail to realise the full potential value addition.

Rubber (*Hevea Brasiliensis*) is a natural tree of Brazilian rain forests. The latex obtained from the bark of the rubber tree has great industrial value. Its importance has grown to such an extent that it is impossible to think of a modern civilisation, which does not make extensive use of rubber. Rubber was brought to India by the British. The area under rubber cultivation expanded rapidly since the turn of the twentieth century.

The history of rubber cultivation in Kerala began at Thattekad in 1902. The extent of rubber cultivation steadily increased since then. Kottayam district in Kerala accounts for 25 per cent of the land brought under rubber cultivation and 26 per cent of the rubber produced in the country. Forty per cent of the rubber cultivation in 1910 in India was concentrated at Mundakayam. The expansion of rubber is so rapid that it is fast encroaching into the area under cultivation of coconut, which has a history of 3000 years in Kerala. After the Thattekad experiment of planting rubber, Mundakayam became the centre of rubber plantations in Kerala. The average elevation of Mundakayam and surrounding areas is from 500 feet to 2000 feet above MSL. This region receives an annual rainfall ranging from 3750mm to 5000mm (150" to 200"). The local people still refer to the region as the Chotti Valley.<sup>35</sup> Summer is not very extreme as the area receives regular and heavy summer rains much earlier than in the surrounding regions. Foreigners found the climate of Chotti Valley ideal for planting rubber.

J. J. Murphey, J. A. Hunter, K. E. Nicoll, and CMF Rose formed themselves into the Periyar syndicate and started looking for lands to cultivate rubber on the banks of the Periyar River from 1902.<sup>36</sup> The Government of Travancore and the Vanjipuzha chief granted them land in and around Mundakayam. Rubber companies were formed by 1906 at Mundakayam.

The presence of the office of the British Resident at Peermade and of the head quarters of CMS church at Mundakayam were other factors, which favoured the efforts of foreigners to plant rubber. Mundakayam Rubber Planters Association was formed in 1907. An area of 3260 acres of rubber became mature for tapping by 1910. By 1910, Mundakayam became the biggest rubber district in India. The rubber estates were spread over 25 sq. miles, border-

ing Ranni-Sabarimala reserve forests. Initially rubber estates belonged to foreigners only. Prominent persons of the local villages who established relationship with the foreigners had also begun to cultivate rubber in a small way since early twentieth century. Local people began to develop rubber estates from 1910 at Mundakayam and Kanjirapally. Since then, there was a phenomenal increase in the area, yield, and total production of rubber in the State. The extent of cultivation, the quantity of production, the average yield, and the average price of rubber for selected years since 1951 are shown in Table 3.1.

Year	Extent of cultivation (hectares)	Average yield/ha	Price /kg (Rs)
1951	74915	284	—
1961	143905	365	3.28
1971	217198	653	4.20
1981	284166	788	10.00
1991	475083	1076	24.00

Table 3.1 Expansion of rubber cultivation in Kerala

Source: Govt. of Kerala (1995), Land resources of Kerala State: Kerala State Land Use Board, Thiruvananthapuram.

The area under rubber cultivation has been steadily rising ever since planting of rubber began early in the past century. While private holdings of rubber were increasing in number as well as area, the estates have registered a downward trend in area (Table 3.2).

The area under private holdings of rubber increased by 2,85,330 ha from 88,366 ha in 1950-'51 to 373696 ha in 1991-'92. During the same period, the total area of rubber estates decreased by 1965 ha from 47,443 to 45,478 ha.

### Rubber in small and marginal holdings

The land in and around Kanjirapally was under forest (primary or secondary) at the dawn of the twentieth century. The prominent families in the area had residence close to the old church (Akkara Pally or Pazhaya Pally). These families were the pioneers in introducing new crops in the area. The process was, in general, the following: First, the forestland was cleared. Thereafter, the land was allowed to remain uncultivated for about 10 to 15 years. During this period, secondary forests are allowed to grow. The forests are cleared at the end of the period and dryland rice cultivation begun. In the first year of clearing, the land is called Uzhavu and in the second year after the land is cleared, it is called Kala. Two crops of rice and one crop of horse gram are cultivated in succession. A transition from food-based agriculture to cash-crop-based agriculture is slowly made. Plantains, banana, tuber crops, coconut, arecanut, cashew, ginger, and turmeric are the crops thus introduced. Tea had been cultivated by a substantial number from the 1860s. There had existed also factories to process the tea leaves. Tea was replaced by rubber during the first decade of the twentieth century. The traditional variety of coconut trees, which had a long gestation period of 12 to 15 years, and pepper, companion crop of coconut, and rice were cultivated in the same lands as intercrops. Some progressive farmers cultivated tea, pepper, and coconut as intercrops.

No.	Year	Private	Estates	Total area	
		Holdings			
1	1960-'61	88366	47443	135809	
2	1965-'66	118675	55886	174561	
3	1970-'71	142611	55813	198424	
4	1975-'76	159805	52003	211808	
5	1980-'81	206056	47428	253784	
6	1985-'86	293847	47659	341506	
7	1990-'91	361913	45908	407821	
8	1991-'92	373696	45478	419174	

 Table. 3.2
 Comparison of the area under rubber cultivation under estates and private holdings; 1960-'61 – 1991-'92 in (hectares)

Source: Land Resources of Kerala State/ Kerala State Land Use Board -1995

The long gestation period of coconut was one of the reasons for adoption of rubber, which had a shorter gestation period. Coconut prices were not attractive to the producers either. In the early twentieth century the price of coconut hovered around Rs 18 per 1000 nuts. Further, coconuts could be sold during those days only once a year.<sup>37</sup>

The introduction of rubber in the private farms of Mundakkayam owes to the initiatives of Kunjommachan of Karimbanal<sup>38</sup>, during 1910-'14. Using his felicity with spoken English, he managed to obtain 3000 rubber seedlings from a British planter, which he shared with two other families, Anathanam and Karikattuparambil. By the time of his death in 1939, he had developed a rubber estimate of 1000 acres in area, including estates he purchased in Ranni. Kunjommachan was also the first farmer in the area to attempt tea cultivation in coconut gardens and to start a tea factory for pooling and processing the tea leaves plucked from the small and marginal gardens and exporting the processed tea. Over time, the climatic conditions of the low ranges of the area have undergone significant changes and become unsuitable for tea cultivation. Small farmers ceased to cultivate tea and the Karimbanal family closed down its tea factory. Decline of tea cultivation was compensated by expansion of rubber cultivation.

Rubber cultivation had also to pass through several vicissitudes. In the early decades, there did not exist adequate facilities for marketing the latex or selling the wood of rubber trees. There were also periods such as the 1930s, when the price of latex went so low and uneconomical that farmers opted to cut down rubber trees<sup>39</sup>.

The livelihood strategy of common people those days was to cultivate a variety of food crops, which will give them a rich diversity of food materials throughout the year. When cash crops such as rubber were introduced in the area by the English, they were immediately taken up by the rich, educated, and progressive families of Kanjirapally. Some members of these families happened to be employed in the rubber estates raised by the foreigners. They acted as a kind of liaison between the foreigners and the locals. Their proximity to and their

knowledge with the cultivation practices of the foreigners helped them to adopt rubber soon after the foreigners had introduced it in and around Mundakkayam. Rubber spread to the smaller holdings of the local households much later. Some of the early adopters of the small and marginal category did so by stealing rubber seedlings or by bribing the employees of the estates of the English.

The price of rubber had remained highly attractive until 1925. It stood at Rs 4 per pound in 1922; it fell to Rs 2.6 in 1925 and nose-dived to an all-time low of Rs 0.27 per pound in 1935. It took a long time for rubber price to recover. The early adopters of small farmers had planted rubber as early as in the early 1920s. Frustrated with the low price, many among them cut down rubber trees during the late 1920s and 1930s. Some farmers retained the trunks of rubber trees after cutting away their crowns, for growing pepper vines on them. The price of rubber began to look up after 1935. Table 3.3 gives the price of rubber during those years.

Year	Price converted in to Rs.	Unit
1938	Rs. 0.52	Pound
1939	Rs. 0.50	,,
1940	Rs. 0.48	,,
1941	Rs.0.54	,,
1942	Rs.0.58	,,
1943	Rs.0.73	,,
1944	Rs.0.75	,,
1945	Rs.0.85	,,

Table 3.3 Price of rubber from 1938 to 1945

Source: Private accounts maintained by Joseph Vadakkemury, a local cultivator

Small landholders returned in a big way to rubber only by 1943 when prices began rising considerably. The decision to plant rubber was taken also as a response to the general economic situation in the locality. Facilities to process and market rubber had improved vastly. What was most attractive was the round-the-year accrual of income, in place of the earlier pattern under which income accrual was highly seasonal and confined to the period December to May.

Kollamkulam, Karimbanal, and Pallivathukkal were the families, which first established rubber estates in Kanjirapally. The felicity of the members of these families, educated in premier institutions, to speak and write good English, helped them secure jobs in the plantations of the British.

Some basic difference is observed as between the large local landholders and the small and marginal landholdings in their adoption of rubber for cultivation. After the State of Kerala was formed, the first popular government introduced the land reform bill, which stipulated a ceiling for the extent of land that could be held by a family. The only exception to this stipulation was the estates. In order to escape the provisions of land ceiling, lands were brought under rubber and registered as rubber plantations.

The small and marginal landholders were, however, attracted to rubber more by its income calendar. The extension machinery of Rubber Board also played a prominent role in persuading small and marginal farmers to adopt rubber. In the initial days, no farmer used to introduce rubber in his entire holding. A portion of the land was set apart for cultivating tuber crops, plantains, banana, and vegetables.

#### Planting and maturing of rubber and processing of latex

In the initial years, rubber seeds used to be deposited for sprouting in holes dug with crowbars. Contour planting and bench terracing of the contours were not followed by the planters. There were a few diseases that affected rubber trees of which patta marappu (brown bast) was a major one. Farmers had sought to treat this disease with bodo paste applied on the trunk after removing sick bark of the tree. No cover crop such as of clover used to be cultivated in rubber plantations. Rubber trees were usually tapped from the seventh year onwards after planting. Tapping of rubber is done on a daily basis. Traditional varieties of rubber trees yielded very little latex. The standard distance kept between two rubber trees was 18 feet. At the beginning, hired labour from Tamil Nadu and Malappuram in Kerala was used for tapping. Very soon tapping was picked up by local farmers. The method of latex collection practised those days was not very different from what it is today. However, processing of latex into rubber sheets was done in a slightly different and a cruder fashion. There were only very few rubber rollers in and around Kanjirapally. The rubber rollers themselves appeared only after an initial period when the rubber sheets were handrolled using a large wooden roller. The rubber sheet would be kept on a table and persons standing on either side of the table would slowly and uniformly press and roll the wooden roller on the sheet, squeezing the water from the sheet in the process. Iron roller became common only much later. The difficulty in processing rubber was a major factor, which kept small and marginal farmers away from rubber cultivation.<sup>40</sup>

Drying of sheets was done in smoke houses. Since plenty of wood was available, fuel for smoking sheets was not a problem. The colour, dryness, and cleanness were the important quality parameters of rubber sheets.

The following were the stages through which rubber cultivation in and around Kanjirapally has passed.  $^{\!\!\!\!^{41}}$ 

- (i) 1900-1910: Foreign companies and individuals plant rubber
- (ii) 1910-1920: Leading, educated families adopt rubber cultivation
- (iii) Since 1920: Small and marginal landholders adopt rubber cultivation
- (iv) 1928-1935: Cutting down of rubber trees (the Great Depression period)
- (v) 1935-1945: Quota system introduced for marketing of rubber
- (vi) Since 1945: Rubber prices rise and fresh planting begins on a massive scale
- (vii) 1935: Rubber Licensing Committee formed
- (viii) 1947: Rubber Board formed superseding Rubber Licensing Committee
- (ix) Since 1950: Increase in the number of small rubber farmers
- (x) Since 1970: Rubber is taken up by marginal farmers
- (xi) Since 1980: Rubber spreads to sub-marginal holdings.

In the initial years, there did not exist any domestic market for rubber. Rubber sheets were cured and shipped to England by individuals and companies who had quotas allotted to them. Dry sheets were packed in hardboard boxes and were taken to Kottayam by bullock cart, from where it was taken to Alappuzha or Kochi for export to Europe. The value of exported rubber was realised by the producers only after three to four months. Since small and marginal cultivators could ill-afford such long waiting, they had serious hesitations about planting rubber. Only the rich who could afford to wait took readily to rubber.

The major reasons for the unprecedented expansion of rubber are the following:

- (i) Price factor: As the price of rubber remained attractive for relatively long periods of time, more and more farmers were attracted to the cultivation of rubber.
- (ii) Regular flow of income: The income from rubber is evenly spread over the year.
- (iii) Extension Services by Rubber Board: Rubber Board, which has one of the best extension management systems all over India has helped in spreading rubber cultivation.
- (iv) Exemption from ceiling limit: Rubber cultivation is exempted from the ceiling limit prescribed by the Agrarian Relations Act.
- (v) Availability of subsidy: Subsidy for new plantations was introduced in 1979. Until then, subsidy used to be given only for replantations. The new step aided the extension of rubber to newer areas.

Besides subsidies, Rubber Board also issued rubber clones. Low-yielding, traditional varieties were replaced by new clones of high-yielding varieties; rubber was vigorously promoted by the Government of India as part of its import substitution programme.

# 4. Rubber in sub-marginal holdings

### Diffusion of rubber in the micro-holdings

MDS conceived of an income-generating project for the benefit of marginal and sub-marginal landholders in its area of operation in 1981, namely, introduction of rubber in their farms. Rubber used to be cultivated in general by farmers having land holdings of 50 cents and above. It was brought down to holdings below 50 cents under the project termed as *Rubber to the Poor.* The project began to be implemented from 1982. Several hundred farmers joined the project during 1982, 1983, and 1984. For purposes of the present study, rubber cultivation of Panackachira re-settlement colony and Eruthuapuzha *Malavedar* colony alone are considered. Both the colonies, which had a uniform landholding pattern, formed part of the development interventions made by MDS.

*Rubber to the Poor* in essence was a diffusion process of a new crop in micro land holdings. In the present study, we made an attempt to understand the extent of diffusion of rubber in two re-settlement colonies. For this purpose, we have made use of the participatory mapping method. Eruthuapuzha is included in the study with a view to drawing a contrast with Panackachira.

### **Mapping of Panackachira**

A map of Panackachira resettlement colony was prepared with the participation of the local people for understanding the extent of diffusion of rubber at Panackachira. Using the voters' list, every household was marked on the ground by its number.

We prepared four maps. The first map is a physical sketch of Panackachira. This was followed by a social map showing the households of Panackachira. There were houses, which had been built after the voters' list was prepared and hence not having any number. Such houses were marked as 'A' with the adjacent house number. The third map shows the plots in which rubber cultivation began even before the project. For preparing this map, the records of rubber cultivation at Panackachira under the *Rubber to the Poor* project were used. The fourth map showed the status of rubber cultivation at Panackachira as on the date of the mapping exercise.

The number of farmers who adopted rubber in their plots has increased from 27 during 1982-'84, the period of introduction of *Rubber to the Poor* project, to 109 at the time of the study, an increase of more than 300 per cent.

More than rubber going to the poor, what has happened is that the poor have readily gone to rubber. Not only have a large number of sub-marginal holdings adopted rubber, the cultivators have endeavoured also to consolidate their rubber plots. Several households have left Panackachira after selling away their tiny plots of 25 cents each. Similarly, several plots of land, which got fragmented due to partition, were sold away by the owners who left the place for good. In this process, a few large plots of rubber have been formed.



Figure 4.1 Physical layout of Panackachira



Figure 4.2 Social map of Panackachira



Figure 4.3 Rubber adotpion at Panackachira-1983



Figure 4.4 Rubber adotpion at Panackachira-1997

As would become clear from the participatory census data given below, the rubber cultivators in this resettlement colony are better off than the rest.

### Influence of rubber on the livelihood of the adopters

In order to make an assessment of the economic impact of adopting rubber, we conducted a detailed wealth-ranking exercise at Panackachira, separately for adopters and non-adopters.

### Wealth ranking

For this purpose, a sample of 40 households – 20 from among adopters of rubber and 20 from among non-adopters – was selected at random. After discussing with the local people, the following 20 were adopted as criteria for wealth status.

- (i) Salary-monthly /permanent employment of at least one member/family
- (ii) Number of persons working and earning income in a family
- (iii) Extent of land owned by the family
- (iv) Income from land owned by the family
- (v) Quality of dwelling unit
- (vi) Sanitary latrine for the household
- (vii) Own drinking water source
- (viii) Level of education of members of the household parents & children
- (ix) Quality and quantity of food consumed by the household
- (x) Quality and adequacy of clothing of the household members
- (xi) Health status of the members of the household
- (xii) Household furniture and equipment including comfort amenities
- (xiii) Electrified house
- (xiv) Vehicles owned by the household
- (xv) No fragmentation of land in the last 20 years
- (xvi) Additional land purchased
- (xvii) Income from other sources including remittances from abroad
- (xviii) Proficiency in any skilled work such as carpentry/ masonry, etc
- (xix) Livestock as source of income
- (xx) Cash balance / bank deposit / other savings

All the criteria were assigned equal weights of 10 each except for criterion 3, namely extent of land. In this case, one score each was given to each cent of land owned. Based on the total scores obtained, the two sets of sample households were classified into six categories.

These 40 families were examined in a historical perspective also in respect of their health status. Informants who had first hand knowledge of the economic conditions of these house-holds furnished the required information. It is observed that most of the families have risen in their economic scale over the past two decades, but the proportions are higher among the adopters than among the non-adopters (Table 4.1).

	Status in 1977	Status in 1997				
Wealth category	Total	Adopters	Non-adopters	Total		
Rich	1	5	3	8		
High Middle	2	8	0	8		
Middle	15	3	6	9		
Poor	18	3	4	7		
Very Poor	4	1	7	8		
Total	40	20	20	40		

 Table 4.1
 Wealth status of adopters and non-adoptersin Panackachira, 1977 & 1997

It is observed that among the non-adopters, a large number remains in the lower wealth categories while adopters are found more among the higher categories. Obviously rubber cultivation has helped these families to improve their wealth status during the past two decades.

### **Participatory survey**

A participatory survey was taken about the extent of land possessed and caste details of the adopters and non-adopters of Panackachira. While all the adopters are included in the census, only 106 non-adopters were surveyed, for the purpose of a control group. The adopters and the non-adopters live in adjacent households. Details of the data obtained from the participatory survey on the community/caste distribution of adopters and non-adopters are given in Table 4.2.

Total rubber adopters	109		Total non-adopters	106	
Community	No.	%	Community	No.	%
Christian	30	27.52	Christian	21	19.81
Ezhava	35	32.11	Ezhava	19	17.92
Harijan	14	12.84	Harijan	38	35.85
Hindu Nair	04	3.67	Hindu Nair	-	—
Muslim	11	10.09	Muslim	14	13.21
Vilakkithala Nair	02	1.83	Vilakkithala Nair	03	2.83
Viswakarma	13	11.92	Viswakarma	11	10.38
Total	109	(100)	Total	106	(100)

 Table 4.2
 Caste-wise distribution of families at Panackachira Resettlement Colony

The results of the participatory census were analysed by a group of people of the locality. It was found that 109 rubber adopters held 47.17 acres out of the 150 acres of land originally allotted to the evicted families. There are 480 households in the study area at present. Rubber adopters account for 23 per cent of the total households and own nearly 32 per cent of the total land. The non-adopters have lost land while the adopters have gained land.

It is observed from Table 4.3 that households of adopters have, on the average, holdings of larger size than non-adopting households have. Non-adopters seem to have lost some of their lands to the adopters. The distribution of land among the various communities shows variations, but not have any consistent pattern. More than two-thirds of the land held by adopters belongs to two influential communities, Christians and Ezhavas.

Caste	Total area held (% in brackets) (acre)		Average holding size in cents	Total area held (% in brackets) (acre)		Average holding size (cents)
Christians	13.58	(28.79)	45.27	3.94	(19.52)	18.76
Ezhavas	18.43	(39.07)	52.66	3.59	(17.79)	18.89
Harijans	3.83	(8.12)	27.36	6.01	(29.78)	15.82
Hindu Nair	1.25	(2.64)	31.25			
Muslims	4.95	(10.49)	45.00	3.03	(15.01)	21.64
Vilakithala Nair	1.55	(3.29)	77.50	1.21	(6.00)	40.33
Viswakarma	3.58	(7.60)	27.54	2.40	(11.89)	21.82
Total	47.17	(100.00)	43.27	20.18	(100.00)	19.04

 Table 4.3
 Land distribution according to community: Adopters and non-adopters

From Table 4.4, it may be seen that while among adopters, the proportion of cultivators holding less than 25 cents is only less than 5 per cent, the corresponding proportion among non-adopters is high as more than 50 per cent. Similarly, cultivators owning land above 50 cents is about 20 per cent among adopters as against a mere 2 per cent among non-adopters.

No.	Land holding classes in Cents	Adopters (No.)	%	Non-adopters (No.)	%
1	0 to 10	2	1.83	34	32.07
2	11 to 24	3	2.75	21	19.81
3	25 Cents	59	54.12	45	42.45
4	26 to 50	24	22.01	4	3.78
5	51 to 75	6	5.5	2	1.89
6	76 to 200	15	13.76	0	0
	Total	109	100	106	100

### Table 4.4 Size distribution of land holdings

#### **Rubber and food**

Increasing dependence on a mono-cultural practice such as cultivation of rubber has its repercussions on the quantity and quality of food consumption of the households concerned. Shifting cultivation from mixed cropping to rubber has meant growing dependence of the adopters on purchased food. Though the practice of buying food materials and food articles and eating out has been steadily on the rise in all parts of Kerala and among all sections of the popula-
tion, it is observed that among cultivators who continue to practise mixed cropping and raise a variety of vegetables, fruits, tubers, and grains, market dependence for food is still relatively low. This is the case in the present study area as well. The extent to which market dependence has increased and quality of food intake undergone changes among the different economic categories of adopters and non-adopters, was therefore examined in some detail.

Food consumption habits have undergone significant changes in the area during the past two to three decades. Small teashops and local restaurants have come up in large numbers. Men have made it a habit to eat from the local restaurants their breakfast and evening refreshments usually on their way to workplace and return home after work. However, women get fewer opportunities to eat out; even working women take their noon meals from home. Nonworking women do not eat from outside home at all.

Information was collected about the food consumption pattern of the selected families for a week during two periods in the year: September/October and April/May. The categories of food, its components and quantities were also recorded. The families were grouped into three categories: poor non-adopter families, well-off non-adopter families, and adopter families.

A Food Path Analysis was attempted. The summary of the findings is presented in Table 4.5.

The labour component in the preparation of food consists of the following:

- (i) Drawal and transport of water
- (ii) Collection and transport of fuel
- (iii) Purchase or collection of food components
- (iv) Preparation of food

Collection of water, fuel, and food components and cooking food are considered the responsibility of women. In summer, women traverse long distances to fetch water. Fuel is collected from places still farther off, from forests or nearby rubber estates. Women go in groups to bring fuel wood on head. Collection of water and fuel takes away their working time. However, the task of purchase of rice, wheat, and provisions is shared by men and women. Men bring the provisions on their return home from workplace.

The variety of food items for the adopter families is found to be much less than for the nonadopter families. The cropping calendar of Kerala is such that several crops including fruits, vegetables, and tubers become available for harvest from the month of January. All nonadopter families who possess land, say at least 10 cents, receive one or a few such items. Coconut and jackfruit are the most popular and common items. While coconut is available almost throughout the year in intervals, jackfruit becomes available from February. Other tuber crops such as Amorpho phallus (*chena*), Colocaseae (*chembu*), and Diosporea (*Kaachil*) are the common items of tubers. The non-adopter families consume a substantial share of what they produce, saving the remaining part as seeds or planting materials for the next season. These food items are seldom bought for consumption, mainly because of their high prices, but also because they become available in the market when income from rubber

Meal	Rubber adopter	Non-adopter
Breakfast	Raw rice-based food like Puttu, Idli, <i>Dosa</i> , etc with Chatni, Sambar & Plantains Tapioca (fresh); fresh fish, Rava, Wheat: All items pur- chased	Rice-based food like <i>Puttu, Idli, Dosa</i> , etc with <i>Chatni, Sambar</i> , and Plantains; Tapioca, Fresh Fish; Rava, Wheat, Co- conut (Own); Vegetables (Own and pur- chased)
Lunch	Rice, Fish, Dal, Egg, Vegeta- bles, Meat (All items pur- chased) <sup>42</sup>	Rice, Fish, Dal, Egg, Vegetables, Meat (the vegetables used in the week o the survey included Pappaya, Banana, and <i>Cheera</i> leaf. These were produced in own garden. Coconut produced in own gar- den was added in the curries. Meat was observed only in one family and that too only once in the week
Evening Tea/ Coffee	Black Tea or Coffee is taken. Snacks are given to the school going children on their return from school. The better off peo- ple purchase bakery items occa- sionally.	Black Tea or Coffee. Snacks are given to school-going children on their return from school. However, the evening snacks comprise usually food left over from either lunch or breakfast.
Supper	Rice, Fish Beans, Green Gram; All items are prepared from pur- chased raw food materials	Rice/Kanji, Achar, Chilly, leftover veg- etables or fish of the noon meal. Veg- etables and chilly are from own garden.

Table 4.5 Food path analysis of adopters and non-adopters

begins to dwindle in the adopter families. Thus the non-adopter families have a more varied food basket than the adopter families. Tomato, cabbage, and beans are the common vegetables available in the market. When the food habits are absolutely dependent on market supply, food diversity is reduced. More than men, this affects women adversely. The choice of items bought from the market would be different as whoever be the purchaser, the basket would have only a smaller number of items, for the adopter families. For example, tapioca, which used to be a staple food item of the common people, has become scarce; but it is available in the market throughout the year. Since it has become prohibitively costly, the common person cannot afford to purchase it everyday. *Maida*, wheat flour, and wheat have become common substitutes for tubers such as amorpho phallus, diosporea, colocaseae, sweet potato, and tapioca.

Consumption habits of households have undergone significant changes over the past quarter of a century. Earlier, consumption was almost entirely of home-cooked food. Now, eating from teashops and restaurants has become more frequent. Further, food items available in packets are bought and used at home now, a practice almost unknown earlier. More fresh fish is now consumed since hawkers reach every nook and corner of the colony. Earlier, only dry fish was available. Higher dependence on outside sources for eating has tended to drain away an increasing part of the wage income of male workers. In consequence, income reaching home for meeting the consumption needs of the households is getting smaller. This type of drain happens also from non-wage income, such as sale proceeds from cash crops. The women of the households, responsible for the collection of fuel and water, and who perform all the household chores, have less opportunities than men to come directly into contact with the market. In case of subsistence agriculture, the produce is held by women and used according to their discretion. Rubber cultivation has decreased the availability of nutrition for house consumption, reduced women's control over food and reduced the variety of food items available for home consumption.

#### **Rubber and environment**

Farm profiles of rubber plots and non-rubber plots at Panackachira, including plot-wise inventories of the plants and trees and a calendar of monthly expected yield from them, were prepared in the course of our filed investigation. It is observed that rubber plots give income to households during January to December and during June to August. Yield from rubber accrues to men folk who convert it to cash income from which they meet their travel costs and personal expenses. Yields from non-rubber plots are in the form of fruits, vegetables, and tubers and are mostly consumed by the members of the family. Women and children get a good share of the food made out of these items produced in own gardens. Such items do not form part of food if they are not produced in own gardens since they are hardly purchased for home consumption.

The Rubber Board provided the technical expertise for planting of rubber in plots brought under the *Rubber to the Poor*. The rules and regulations enforced by the Rubber Board with regard to distances to be kept between rubber plants and the other varieties of trees and plants that may be allowed in the rubber plots were very stringent. Seven other trees were permitted to be grown in an acre of land brought under rubber. Therefore, the number of trees in a 25cent plot was hardly two. If a farmer were to receive subsidy from the Board, he had to strictly follow the rules.

There is some difference between plots of land cultivated with rubber with and without financial subsidy from the Rubber Board. In plots where financial subsidy is not availed, landholders have planted other tree crops (Fig. 4.12). Since these other tree crops are planted only after the rubber canopy has been established, they do not grow to their full potential due to lack of sunshine. If such trees and plants are to survive, their planting should also be done together with the planting of rubber.

Rubber cultivation has drastically reduced the biological and plant diversity in the plots concerned, apart from reduction of crop diversity. Differences are observed between plots of rubber and of non-rubber in respect of soil erosion, water run-off, water retention capacity, and nutrient flow. There is nothing, except the rubber trees to prevent water run-off in a rubber holding. The soil quality in the area is such that the finer humus-binding particles of the soil are easily washed off by the torrential rains. Small pebbles lie separated on top of the soil. Therefore soil erosion is much more rampant in rubber plots than in mixed crop plots.



Figure 4.5 Farm profile of an exclusive rubber plot

**Facilitated by** P.K Kurien and S. Nylekumar Sali, Vasan, Titus, Raju, Annakutty, Shobhana, Lucy, Achamma, Jessy, Moly, and Shailaja



Figure 4.6 Farm profile of a mixed rubber plot

**Facilitated by** P.K Kurien and S. Nylekumar

**Prepared by** Sali, Vasan, Titus, Raju, Annakutty, Shobhana, Lucy, Achamma, Jessy, Moly, and Shailaja



Figure 4.7 Farm profile of a mixed crop-non rubber plot

Prepared by Sali, Vasan, Titus, Raju, Annakutty, Shobhana, Lucy, Achmma, and Jessy. Facilitated by P.K Kurien and S. Nylekumar

Figure 4.8 Rubber and environment: An impact diagram



Water absorption and retention in the soil are also less in rubber plots. Another important consideration is the nutrient flow pattern as between rubber and non-rubber plots. The rubber trees are tapped and the latex collected to make dry rubber sheets. This is a pure market-oriented product. No rubber plot that we analysed showed any indication of adding to the fertility of the soil. This means that the nutrient stock of the soil is continuously and steadily converted into a marketable product. Nutrients removed from the soil are hardly replaced; soil nutrients get continuously depleted; and in the long run soil gets absolutely impoverished. The inventory of plant species in a rubber plot looks more planned and systematic than that of non-rubber mixed plot, but the latter is richer and much more diversified (Table 4.6).

#### **Rubber and seasonality**

Seasonality consideration is foremost in the study of any rural livelihood situation. Even the adoption of rubber in sub-marginal, marginal, and small landholdings is based on seasonality considerations. One of the important seasonality considerations in a climatic calendar is the famine months. The climatic calendar of rural Kerala is divided into two: six months of rains and six months of summer.

The rainy months begin in June and lasts till October, and are difficult times for the poor cultivators and the agricultural workers of Kerala. Most of the crops get harvested in the post-monsoon months. Crops such as rice and tapioca, and tubers like *Amorpho Phallus* get ready for harvesting by September/October. Nevertheless, these crops are dwindling in area cultivated and quantity produced year by year. When crops such as these go out of currency, people look for other crops, which would fetch them ready cash income. Decline of rice, tapioca, and other food crops has affected the livelihood security of people adversely. Naturally, people have been looking for a crop that would bring them income immediately after the long rainy season. Looked at from this point of view, rubber is a crop that can bring early income, giving respite to the adopters after long months of misery and hunger, famine and insecurities of livelihood. Earlier, people used to stock sufficient food grains and other food materials to keep their household going during the rainy months<sup>43</sup>.

Employment opportunities are few during the peak rainy seasons. Households of the poor go with food stocks. This is a trying period for the marginal and small farmers as well. Even skilled and semi-skilled workers like carpenter, mason, and quarry worker have to spend most of this period without work. Availability of work to unskilled casual workers, rubber tappers (in estates and private holdings) dips to the lowest level. The private tapper goes without work throughout the months of July and August. The estates provide their tappers some jobs other than tapping, such as planting bushes and growing ground cover vegetation in the rubber estates primarily with a view to give them some income.

During this season, the rubber trees are rain-guarded so that some tapping becomes possible during short intervals of rain-free days. However, the practice of rain-guarding of rubber trees is not found among the marginal rubber holdings of Panackachira. Income from rubber starts trickling in soon after the rainy season. In comparison to the other conventional cash crops such as pepper, coconut, and cashewnut in the midland agro-climatic region of Kerala,

Characteristics	Mixed Crop / Non Rubber *	Mixed crop/ Rubber without subsidy from Rubber Board **	Rubber as a monocrop***
Ground Cover	Ground covered with grass, weeds, shrubs and leaf litter	Sparse ground cover	No ground cover at all
Water Runoff	Slow and Tardy	Water run off faster, pits dug to collect water	Water run off - very fast. Nothing to pre- vent water run off
Soil Erosion	Less	Less but more than in a mixed crop	Soil erosion - tre- mendous soil loss.
Crops	Coconut/	Rubber/ Coconut/	Rubber
-	Jack Fruit /	Arecnut/ Mahagony/	
	Mango Trees /	Coffee/ Cashewnut/	
	Cashew nut/ Pineapple Pepper Banana & Plantains Colocassia Dioscorea Amorpho Phallus Cheru Kizhangu Nana Kizhangu Arecnut Drumstick Tree Guava Fruit Tree Guava Fruit Tree Champa Coffee Plants Bread fruit Tree Turmeric Cheera Lady's Finger		

 Table 4.6
 Farm profile comparison

\* Details collected from the mixed crop plot of Sri. Varghese Pareparambil- Panackachira

\*\* Details collected from the plot of Thankachan Lahayilputhuparambu, Panackachira

\*\*\* Details from Sri. P. D. Pappa, Puthuparambil

this brings some relief; in these other crops, yield becomes available only from January. The only exception is the coconut. Coconut is not a substantial income source for the non-adopters of rubber. It is consumed in households. Rubber is held for being an extensively distributed income source in a year. Rubber has enhanced the creditworthiness of adopters. Shopkeepers and businessmen supply them with provisions and food materials on credit during the peak

monsoon period (when rubber growers go without income) as they are sure to receive payments soon after the rains. In the matrix given below an attempt is made to compare the seasonality of yield from rubber and non-rubber plots.

Details	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rubber												
Non Rubber												

Table 4.7	Seasonality of	crop yield	from rubber	and non-rubber	plots
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Tables 4.8 and 4.9 show the seasonal distribution of yields of rubber and non-rubber holdings. Accrual of more evenly distributed income from rubber is the major reason for largescale adoption of rubber. As the monsoon rains reach the peak, employment, income, and farm yields dip to their lowest levels affecting livelihood of the people adversely (Fig. 4.5).

Table 4.8 Seasonal variation in yield difference of rubber and non-rubber crops

Details	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rubber												
TUBBEI												

**Table 4.9 Seasonal Variation in Yield Difference of Non-Rubber Crops** 

Non						
Rubber						



Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Quarry	25	24	24	26	18	12	18	20	22	24	24	26
Worker			1									
Carpenter	26	26	26	24	22	20	18	19	25	26	26	24
Mason	24	24	20	18	26	22	23	24	25	26	26	26
Estate	24	20	12	20	22	21	21	21	23	26	26	26
Tapper			1									
Pvt.	15	13	14	10	10	2	0	0	5	12	14	15
Tapper			1									
Causal	22	24	26	26	20	14	8	8	16	22	23	24
Worker			1									

 Table 4.10
 Average no. of days of employment per worker/month according to type of work

 Table 4.11 Availability of food products from a non-rubber plot

Trees / Plants	Product	Season
Coconut	Coconut	Sept / Dece/ March/May
Jackfruit	Jack Fruit	January to May
Mango	Mango	March to May
Cashew nut	Cashew nut	February to April
Pineapple	Pineapple	December to May
Pepper	Pepper	December to February
Banana & Plantain	Banana / Plantain	October to May
Colocasia	Tuber	December to February
Dioscorea	Tuber	December to February
Amorpho Phallus	Tuber	September to December
Cheru Kizhangu	Tuber	December to February
Nana Kizhangu	Tuber	December to February
Arecnut	Arecnut	October to March
Drumstick	Drumstick & Leaf	December to May
Guava Fruit	Guava	December to May
Champa (Lythraceae)	Fruit	December to May
Coffee	Coffee Bean	December to March
Bread fruit	Raw Fruit	May to October
Turmeric	Food Spice	December
Cheera (Euphorbaeceae)	Leaf	Year round
Lady's Finger	Vegetable	August to October
Aatha (Annonaceae)	Fruit	December to May

Trees / Plants	Product	Season
Rubber	Dry Rubber Sheet	January to May September to December
	Occasional supply of twigs as fuel	June to September

 Table 4.12
 Availability of income and yield from an exclusive rubber plot

## Gender sensitivity and rubber

Rubber is a crop, which is not very gender-discriminatory. Women are involved in large numbers in nursing rubber trees and harvesting the yield. Women nurture rubber plants during their bearing stage. Once the rubber trees reach the bearing age, tapping begins. Tapping is done usually by professional private tappers. A tapper works in several plots, as the number of trees in each plot is quite small. In some areas, tapping is done by the owner of the household itself. Tapping is done early in the morning. It is possible for a member of a household to complete tapping in his farm and then take up casual work elsewhere the same day. After tapping, the latex is collected. The latex is processed into lump sheets and thinned in a roller. Collection of latex, rolling latex into lump sheets, and thinning of sheets are done by women. There are only five rubber rollers at upper Panackachira colony. Women carry the sheets on head to the sites where rubber rollers are kept for thinning.

Time disposition analysis of women was undertaken to find out their daily routine. The women's schedule of engagements was found very tight, hardly giving them time to rest during the day. Women's time disposition chart was prepared for tapping and non-tapping seasons separately (Table 4.13).

Activity	Non-tapping Season	Tapping Season
	(Percentage of time a	gainst each activity)
Morning chores	2	2
Cooking	28	28
Rubber-related work	Nil	10
Washing clothes & bathing	8	10
Collection of firewood	6	6
Rest	8	2
Sleep	48	42
Total	100	100

 Table 4.13
 Time disposal pattern of women during tapping and non-tapping seasons

Though women's participation in the collection and processing in latex is intense, they do not get a commensurate share in the income from rubber. Very often, dry rubber sheets are sold in the market by men and the income accrues to them. Women in a vast majority of households observed that they have very little role in decision-making about how income from rubber is spent. It appears that granting them rights to incomes or role in spending decisions

of the households is essential. Cultivation of rubber deprives the household, particularly, women and children, of their natural sources of nourishment – fruits, vegetables, and tubers, and renders their consumption poorer in quality and variety.

#### A study in contrast: Eruthuapuzha Malavedar re-settlement colony

Eighty-seven families belonging to the *Malavedar* tribe were resettled at Eruthuapuzha in 1983. They were organised to take up rubber cultivation under the *Rubber to the Poor* project. These families had been residing in various villages either on road or river *porambokes* or lived as tenants in huts built in their landowner's plots. Most of these families came from places such as Koovapally, Pazhayidam, Manimala, and Chenappady. Each family received 15 cents of forestland at Eruthuapuzha. Houses were constructed here for the tribal families either under RLEGP or NREP schemes. The tribesfolk did not have the right to sell off their lands. A few families have left the place; but their plots remain, of course, unoccupied. *Malavedar* tribe is not entitled to receive benefits from public funds for any purpose other than education.

Some occupants of the Eruthuapuzha *Malavedar* colony recall that they were welcomed by Malanad Development Society with a poly bag rubber plant. When the tribal families were evicted from their temporary abodes on the river *poramboke*s and brought to Eruthuapuzha by truck, the Kanamala unit of MDS made preliminary arrangements to settle them in the new place. That was the period when the Rubber to the Poor project was under implementation. These tribal families also joined the project. There are 92 plots of 15 cents each at Eruthuapuzha *Malavedar* colony, 5 being common amenity plots. In 66 of the remaining 87 plots allotted to occupants, rubber was planted. Some of the occupants have since left Eruthuapuzha. At the time of our survey, there were only 64 settlers left in the colony.

We made a mapping exercise to document the status of rubber project in the Eruthuapuzha colony. Out of the 66 plots in which rubber was planted, only 10 plots have rubber; the other 56 occupants have destroyed or slaughtered rubber. Five of them have replanted rubber in the plots. This is a picture quite in contrast with that of Panackachira. About 75 per cent of the original adopters of rubber have opted out of it in a matter of just 15 years.

The tribesfolk had been living in the *poramboke* lands in the interior villages of Kanjirapally taluk, for long periods of time, doing agricultural work as casual wage labour. Houses were constructed for them by the government under various schemes through the intermediacy of Malanad Development Society (MDS). The gesture of goodwill shown to the tribesfolk through help rendered for settling them down in temporary hutment in Eruthuapuzha left a deep imprint in their minds; they were therefore all too ready to accept the rubber project. In consequence, the diffusion of rubber at Eruthuapuzha was far more rapid and extensive at the first stage than at Panackachira. Close rapport between the tribal community and MDS helped the process of diffusion. However, it may be mentioned here that some people stayed away from the *Rubber to the Poor* programme. Rumours were planted in the community to the effect that the tribesfolk would be converted to Christianity and that the rubber project was only a ploy to achieve this ulterior purpose. However, the vast majority of the people did adopt rubber.

Though the tribesfolk readily accepted rubber at the first stage, they found living difficult by exclusive dependence on rubber. As already mentioned, 56 of the 66 households which planted rubber have retracted their step and destroyed it. Of course five of the households, which destroyed rubber have reverted to it and done replantation.

What are the reasons for the *en masse* destruction of rubber?

- (i) The tribesfolk had no previous experience in rubber cultivation and management of rubber trees. They were totally unaware of the practices of fertiliser application and nursing of trees during disease.
- (ii) Lack of tapping skill: The original plan proposed to the tribesfolk was that skilled workers would be appointed to tap the rubber until such time that the tribesfolk themselves acquired the skills. However, this did not materialise as the tribesfolk fell foul of MDS. MDS discontinued work in the tribal resettlement colony till the time rubber trees reached the tapping age. The tribesfolk, though inexperienced they were, did the tapping themselves and in the process brought down the length of life of the trees.
- (iii) Internal tensions developed in the colony as a result of which a few of the occupants were forced to leave it. Those who stayed behind took possession of the plots thus vacated. Some of the earlier occupants who left the colony had done so only after cutting away and selling all the standing trees in their plots.
- (iv) The rubber trees planted in the colony were of the high-yielding variety easily vulnerable to pests and diseases. The tribesfolk could not do much to control diseases effectively. Cutting away disease-striken trees thus became quite common.
- (v) The occupants had more serious disabilities than the occupants of the Panackachira colony in several respects. They were not skilled workers; many of them practised climbing coconut trees to make a living. During the rainy season, the tribesfolk went without employment and income for weeks on end. Hunger and diseases are rampant in Eruthuapuzha during the period. The tribesfolk are not entitled to sell away their land allotted by the government. In the absence of any other sources of income, tribesfolk sometimes cut down rubber trees and sell the wood as firewood to local traders. Alternatively, they give yielding trees on lease for tapping for one or two years after receiving in advance the agreed lease amount. Reducing vulnerability to contingencies has to be a direct objective of rural development programmes. *Rubber to the Poor* may be considered one such programme. However, the *Rubber to the Poor* project did not turn out to be real help in the case of tribesfolk on a sustainable basis.

Looking at the history of rubber and its adoption in Kerala, we find that it was people at the top of the socio-economic echelons of society who were the pioneers among the adopters of rubber. It was brought to the level of sub-marginal farmers by activities of MDS. Tribesfolk who became part of the MDS programme for spreading rubber to the poor were the last of the adopters.



Figure 4.9 Distribution of houses at Malavedar colony-Eruthupuzha-1983



Figure 4.10 Eruthupuzha Malavedar resettlement colony-rubber adoption 1983



Figure 4.11 Gubber status in 1997 for the malavedar colony, Eruthupuzha

There existed a lot of cultural incompatibility between the tribesfolk and rubber as a crop. No effort was made to save rubber from destruction at the hands of the tribespeople who were in dire need of cash. It may be seen that other trees like coconut and jackfruit survived while rubber trees were brought down. The former gave the tribespeople food, a contribution, which they considered much more valuable than what rubber tree could ever give them.

Of course, tribespeople consider rubber a useful crop due to its income potential. However, not all of them feel confident to undertake replanting of rubber all by themselves. Only five households have replanted rubber at Eruthuapuzha. Seasonal food crops are grown in the lands where rubber stood earlier.

A wealth-ranking exercise was conducted among 63 tribal occupants of Eruthuapuzha colony, the results of which are summarised in Table 4.14.

Class	Rubber Holdings	Non-Rubber Holdings	Total
Very Poor	0	2	2
Poor	6	5	11
Moderately Poor	7	6	13
Poor	13	13	26
Middle	9	4	13
Higher Middle	14	3	17
Middle	23	7	30
Rich	7	0	7
Total	43	20	63

Table 4.14 Rubber and non-rubber holdings in Eruthuapuzha

There are only 10 households, which had rubber trees of the yielding stage at the time of this survey (Table 4.15).

 Table 4.15
 Wealth-ranking of households in Eruthuapuzha

Very Poor	0
Poor	0
Moderately Poor	2
Poor	2
Middle	5
Higher Middle	2
Middle	7
Rich	1
Total	10

Thus economic conditions of households in Eruthuapuzha are in contrast to those of Panackachira. While the households had taken readily to rubber at Panackachira, tribespeople of Eruthuapuzha have fled from it.

# 5. Conclusions

*Rubber to the Poor* project was an innovative idea in agriculture. It brought a new category of people into the cash crop net. If looked from a narrow point of view, one might find that the project succeeded in enhancing the income and assets of the adopters. Rubber trees provided some form of asset for deprived tribesfolk. However, helping people to meet contingencies was not the prime objective of the project. At Panackachira, the development efforts of MDS and MMS and project interventions such as the housing programme and *Rubber to the Poor* did bring social acceptability to the inhabitants of the re-settlement colony. It has imbibed self-confidence in the people and has given them a sense of human dignity. This is the more important contribution of the project.

Income from farm is not the main source of income either for the adopters or the nonadopters; wages constitute the main source. Tribesfolk in the colony find employment in the nearby towns and large plantations.

Income from rubber is well-distributed over a year. This is an advantage which rubber cultivation has over several other crops.

The asset position of rubber adopters is found to be higher than that of non-adopters. Several households sold off their plots in the colony. This has facilitated creation of relatively large plots on which the new owners have introduced rubber. Monsoon months constitute the lean months for the adopters of rubber. During this period, alternative employment opportunities are also few.

Rubber does not seem to have played a crucial role in widening economic disparities between adopters and non-adopters. The average size of landholdings of non-adopters is smaller than that of adopters. Whether non-adoption of rubber alone is the factor responsible for the loss of land for non-adopters is a question, which remains to be examined.

The non-adopters of rubber do not have much farm produce to market. However, the produce from the farm goes to the household food basket. Planting in the plots of non-adopter households is often observed to be unplanned and unsystematic.

The introduction of rubber into the sub-marginal holdings at Panackachira and Eruthuapuzha has resulted in the erosion of the natural resource base and the biodiversity of the home gardens. Question of availability of water, quality of soil, and food security are thrown up by the adoption of rubber in the sub-marginal land holdings. The adopters of rubber who received guidance under the extension support of the Rubber Board/MDS have planned their land use well; the adopters who did not avail of the benefit of subsidy from the Rubber Board have, however, tried to plant rubber together with an assorted mix of other crops.

Livestock is maintained by both adopters and non-adopters. However, fodder is difficult to find in the plots cultivated with rubber. The ground is bare in the rubber plots and there is only a single layer of canopy in them. Since there is no ground cover, rain falls directly on the soil ploughing up the top soil in the process. The finer soil parts and the humus content of

soil are washed off by rainwater. Soil erosion is thus much more in rubber holdings than in non-rubber holdings.

The role of the NGO, which introduced the project in the re-settlement colony, has been crucial. The NGO needs to make a deep reflection on the pros and cons of *Rubber to the Poor*. As an effort in diffusion, MDS did succeed in diffusing rubber among a category of people, which until the *Rubber to the Poor Project*, had been considered to be beyond the reach of rubber. The adopters of rubber are better off than their non-adopter neighbours.

Another question is the socio-economic empowerment of the people as a result of the project. If mere adoption of rubber is the criterion, as was the case of Eruthuapuzha, the fact that the adopters have acquired enough experience and self-confidence to plant and nurse their trees to maturity and successfully take the yield, suggests that it may be considered a success.

However, the social, political, and economic empowerment, which was the expected result of the project, seems to have been poor. Such aspects were not at all built into the project processes. It may be recalled here that one of the basic aims of the project was to instil selfconfidence among the marginal and sub-marginal farmers. The expectation was that thereby they would be empowered to take decisions on their own and to fully understand the rationale behind such decisions. However, in the case of both Eruthuapuzha and Panackachira, the NGO, after its initial years of very active involvement in the project, withdrew. There was the urgent need and the room for its more constructive and sustained involvement. The project could have been used as a model for intervention, which would ultimately lead to social and political empowerment. Such a phase could have come if only there was a builtin and systematic mechanism for monitoring and evaluation. These have been conspicuous by their absence.

Another important question is that of sustainability. To what extent is the project sustainable in the environmental and social sense? The natural resource base has become poorer as a result of the project. Soil fertility, water retention capacity of soil, and vegetative diversity are important aspects to test sustainability. In this respect, the project seems to have inflicted a negative influence on the natural resource base. The food basket of rubber adopters has lost diversity. The trade off between diversified and sufficient quantity of food for the household as a whole and the unequal intra-household distribution of food has gone against the interests of women and children who are more vulnerable in the rural environment.

The social, economic, and environmental sustainability shall be the touchstone of any development intervention. The institutional support from Rubber Board had the single objective of enhancing the income of the rubber adopters in the short run. The project did succeed in this aspect. However, what happens to the poor and the non-adopters? Can a development project be allowed to enhance the wealth and assets of a minority alone against the interests of the majority of non-adopters? The role of institutions like Rubber Board at the government level and that of NGOs like MDS needs to be subjected to deeper analysis. To what extent are the actions of institutions such as these help empowerment of people. Are these processes properly oriented or are they guided only by short-term objectives? Development is the objective of all planned activities. Whose development and whose reality counts are impor-





Asset holding position improved

tant questions to be addressed. There needs to be further enquiry on whether it is permissible to check in-built exploitative tendencies in development projects. NGOs such as MDS need to strive for enhancing their capacity to apply measures for preventing exploitation and ensuring equity, social and environmental sustainability, and empowerment of people through their developmental efforts. To enable it to do it, MDS has to get out of the *project captivity mood*, move on to larger and broader horizons, and *appropriate process missions*.

# **Appendix I**

## Participatory Research Methodology

Participatory Research Methodology (PRM) came about as a research approach by the late 1980s. It is a continuation of Rapid Rural Appraisal – RRA. It is a Rapid, Cost-Effective, and Approximately Correct, method of research and learning. PRM arose in an effort to enquire into the failures of development plans and programmes. Robert Chambers is considered the Father of Participatory Rural Appraisal. Questionnaire and survey methods were costly, time-consuming, and did not bring forth the required qualitative information. Similarly, evaluations and studies were conducted by experts who were people outside the community. Instead of this expert-oriented approach, there began a search for a people-oriented approach in which Indigenous Technical Knowledge (ITK) is considered prominent and the local people who have ITK are considered knowledgeable.

PRM has a strong Interdisciplinary basis. It has borrowed heavily from other social disciplines like Social Anthropology, Sociology, Psychology, Public Administration, Statistics, and Quantitative Analysis.

PRM makes an attempt to support communities to analyse their problems/situations. Researchers will in all probability emerge from the community as a result of the research. The researcher is a facilitator who helps people to analyse and interpret their own situation. A comparison of PRM and Survey Research Method is given below.

Characteristics	PRM	Survey Research
Duration	Short	Long
Cost	Low to Medium	Medium to High
Depth	Preliminary	Exhaustive
Scope	Wide	Limited
Investigation	Multi-disciplinary	Weak
Structure	Flexible and Informal	Fixed & Formal
Direction	Bottom Up	Top Down
Participation	High	Low
Methods	Basket of Tools	Standardised
Major Research Tool	Semi-structured Interview Formal	Questionnaire
Sampling	Small Sample Size (Varied)	Random Sampling
Statistical Analysis	Little or None	Major Part
Individual Case	Important & Weighted	Not Imp. & Not Weighted
Formal Questionnaire	Avoided	Major Part
Organisation	Non-Hierarchical	Hierarchical
Qualitative Descriptions	Very Important	Not as important as hard data
Measurements	Qualitative or Indicators used	Detailed & Accurate
Analysis/Learning	In the Field & On the Spot	At Office



See diagrammatic representation given below.

### Venn Diagram:

Named after John Venn, mathematician (1834-1923). He devised a diagram in which sets and their relationships are represented by circles or other figures. In PRA this is used to show relationships of various institutions, organisations, programmes or individuals with one another and with the village as perceived by the villagers. In general, this is used to establish a total picture in terms of the villagers' relationship with different institutions. It can bring out the kind of services, which the community receive or do not receive as much as they desire.

## **Participatory Mapping**

Mapping is a visual exercise to understand a social or resource situation. There are basically two types of maps: Social Map and Resource Map. Social Map is a construction of the village living area using locally available and other appropriate materials. A map may be constructed on the floor. The village layout showing the main features such as houses, places of worship, workshops, stores, business establishments, schools, and other institutions can be marked symbolically. It is possible to build other items of interest on to it. Animal census, education, health, land holdings, land fertility, irrigation facilities, etc., can be brought up into the map. Resource Map can be constructed to locate the resources of the village, such as forests, watersheds, rivers or streams, wells, ponds, paddy-fields, etc. These maps are useful for planning and implementation of development projects, for outsiders to learn about a place, to take a census, to reconstruct the past as well as to construct futuristic situations.

### Wealth Ranking

Wealth Ranking is an exercise done by the people to classify/categorise the people based on the their wealth or well-being. The community members' own perceptions of wealth are taken here as the basis to do wealth ranking. A discussion is initiated with the local people on what is wealth and what are the wealth criteria in the context of the village. The people define wealth and prepare indicators of wealth in the local conditions. Those who are subjected to wealth ranking are scored and wealth classes are made on the basis of the total score. If applied with slight innovation, this method of wealth ranking can generate a lot of other information as well. If applied with proper indicators, it can give the beneficial results of a quick questionnaire survey.

### **Seasonality Diagrams**

Seasonality diagrams are used to describe the seasonal patterns in rural life as related to rainfall, farming practices, festivals, employment, health problems, and natural calamities. An attempt is made to determine the seasonal calendar as understood and practised by the villagers. This is either in terms of festivals such as *Ugadi, Deevali* or *Sankranthi*. Seasonal calendar has the following applications:

- (i) To understand livelihood systems;
- (ii) To understand the relationship between seasons for the villagers;
- (iii) To understand the problems and opportunities of various groups and communities

and even individuals; e.g., the problems of women, children, and elders as well as farmers and other employees in various seasons;

- (iv) A seasonal calendar brings out the pulse of rural/community life;
- Every activity is governed by this calendar. The monsoons, water availability, water demand, fodder availability, income, savings, credit and debt, expenditure, labour migration, illnesses, harvesting all have a definite relationship to seasons.

# **Appendix II**

Travancore Rubber and Tea Company (Tr & T Co. Ltd.) was formed on 1 January 1945 with the amalgamation of 'The Central Travancore Rubber Co. Ltd. And The Travancore Rubber Co. Ltd. Messrs Aspinwall & Co. Ltd was the managing agents. At that time, the present four estates were working as shown below:

### Valley End Group consisting of

- Kuppakayam Estate with the following divisions: Kuppakayam Rubber Division Kuppakayam Tea Division Chennappara Lower Division Kuppakayam Factory
- (ii) Valley End Estate with the following divisions: Velloni Division (Tea) Chennappara Top Division (Tea) Valley End Tea Factory

#### Kadamankulam Group consisting of

- Kadamankulam Group consisting of: Manikal Estate with the division Manikal Division Anaikulam Division Manikal Rubber Factory
- (ii) Orkadan Estate with the following divisions: EDK Division (rubber) MDK Division (Tea) Orkadan Tea Factory

The management of the company was taken over from Aspinwall & Co. by Mr S. Sivaramakrishna Iyer in October 1962. Until 1962, Europeans were the managers of the company. The employment system was quite different from the present system. There was *Kangani* system and the workers were supplied by *Kanganis*. The *Kangani* system was stopped in 1952. The workers were absorbed by the Estate Group. Then the category of supervisors came into existence and all *Kanganis* were named as supervisors.

Source: "My reminiscences about the Travancore Rubber and Tea Co., Ltd. During my service in the company for the last 47 years", P. K. Divakaran, Internal Auditor.

# **End Notes**

- 1 Malanadu Development Society is a registered charitable society, registered under No. K-201/77 on 18 July 1977 under the Travancore Cochin Literary, Scientific and Charitable Societies Act of 1955. The Diocese of Kanjirapally was established through Papal decree in 1977 bifurcating the Archdiocese of Changanacherry. The area of operation of the project falls within the jurisdiction of the Diocese of Kanjirapally, spread in the districts of Kottayam. Idukki, and Pathanamthitta. MDS is the official organisation of the Diocese of Kanjirapally for social and development works.
- 2 The villages comprised Alampally, Anakkara, Chemmannu, Kalthotty, Kanyankavayal, Kochera, Nettitthozhu, Peruvananthanam, Ramakalmedu, Thekkemala, Vallakadavu, Vandanmedu (in Idukki district); Anickadu, Kanamala, Kanjirapally, Karikulam, Kollamula, Koovapally, Manipuzha, Panackachira, Panapilavu Punchavayal and Thulapally (now in Pathanamthitta district but formerly in Kottayam district).
- <sup>3</sup> "Livelihood is used here to describe an adequate and secure stock and flow of cash and food for the household and its members throughout the year and the means to meet contingencies". To the Hands of the Poor - Water and Tress' by Robert Chambers, Thushar Shah and N.C. Saxena.
- 4 MLO is used here to mean micro level organisations. MLOs are the village level subsidiary organisations of MDS. These are usually attached to a parish or even a resettlement colony. There will be one or two trained animators for each MLO, besides a people's committee. The local parish priest or an acceptable person acts as the patron to the MLO. The MLO plans and implements its own activities besides implementing the centrally planned programmes of MDS. The list of MLO centres which implemented Rubber to the Poor are given in FN<sup>2</sup>.
- 5 MDS provided financial assistance to the beneficiaries under the project partly as grant and partly as loan. The external donor for the programme was B.H. Misereor e.v. and the funds were given through Indo-German Social Service Society, New Delhi.
- 6 Micro-level projects such as 'Collective Rubber Cultivation' at Vandanpathal near Mundakayam and 'Cardamom Cultivation' at Nettithozhu in Idukki district provided insights into the possibilities of 'Rubber to the Poor' and are considered its forerunners.
- 7 B.H. Misereor e.v. is an organisation of the German Catholic Bishops, acting as a donor agency.
- 8 Catholic Relief Services (CRS) is the official overseas relief and development agency of the American bishops.
- 8 See Participatory Research Methodology in References and explanations.

- 9 Source: Tabulated data resulting from a survey of households of Panackachira taken by Medical Mission Sisters at Panackachira.
- 10 Puramboke: It is a Malayalam word which literally means area left out. It could be land by the side of roads, streams or rivers and is considered the common land of the panchayat or of the revenue department of the Government.
- 11 A large congregation of the poor destitutes, fugitives, and indigent came to occupy the common lands of Mundakayam and the surrounding areas.
- 12 This seal carried the name of the estate, e.g., the seal TR and T meant that the worker belongs to Travancore Rubber & Tea Company Ltd. Formerly the estate had been developed by Simson and Aspin Wall who sold it to its present owners in 1945.
- 13 'Perattu' in Malayalam language means to smear something. Here, an ink seal was applied on the forearm of the employees.
- 14 In personal conversation with the author.
- 15,16,17: In personal conversation with the author.
- 18 Article in Panackachira Housing Souvenir by K. A. Thomas.
- 19 Panackachira Housing Souvenir, Article by K. R. Bhasi, Page 30.
- 20 In personal conversation with Karunakaran, working at MDS carpentry.
- 21 In personal conversation with Babu Thomas Kalapurakal, a member of the Panackachira Community Animation Team from 1977 to 1980.
- 22 In personal conversation with Sr. Treesa Panancherry MMS.
- 23 Medical Mission Sisters (MMS) is an international religious congregation in the Catholic Church. It was founded in 1925 by Dr. Anna Dengal at Rawalpindi in Pakistan. The context of the origin of MMS is related to the insufficient medical facilities for the poor in general and for Muslim women in particular, who for reasons of religious customs, could not take medical treatment from male physicians.
- 24 In personal conversation with Sr. Sophy. Sr. Sophy came to Panackachira in 1977 and stayed with the community till 1997.
- 25 Fr. Mathew Vadakkemuriyil is secretary to MDS. Prior to becoming secretary to MDS, he was secretary to Changanacherry Social Service Society (CHASS), the social work arm of the Archdiocese of Changanacherry, from 1974 to 1977. During Fr. Mathew's tenure at CHASS, Fr Thomas Karukakalam, vicar of the Vandanpathal R. P. Colony parish church sent a request to the Archdiocesan Charity Fund for assistance to thatch the government primary school at Panackachira. Fr. Mathew and Fr. George Kolath came to Panackachira to make an on the spot study on the situation at Panackachira. After thus establishing contact with Panackachira, Fr. Mathew recruited

Mr Benjamin John as a volunteer and brought him to Panackachira to stay with the community. CRS food programme was extended to Panackachira and Mr Benjamin John was given its charge.

- 26 In personal conversation with Sr. Mary Sebastian, a member of the MMS congregation practising holistic medicine.
- 27 It is Sr. Gabriel, member of MMS who first started rapport-building, health care, and health education at Panackachira. At that time, she was an inmate of the MMT hospital. Sr. Sophy and others joined her subsequently.
- 28 National Service Scheme organised work camps at Panackachira to construct roads, ponds, wells, houses and the school play ground. The first inter-collegiate NSS special camping programme was held in February 1978; 112 students and 10 teachers from 56 colleges under the University of Kerala participated in the camp. Thomas Abraham a teacher participant in the camp and lecturer in English from SH College, Thevara, was moved by the poverty and misery among residences of Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He worked as community organiser during the year 1979-'80. College, Thevara, was moved by the poverty and misery among residences of Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He took leave from his job and decided to become a volunteer at Panackachira. He worked as community organiser during the year 1979-'80.
- 29 Pluralism is a political doctrine which considers that "social authority" is not, from the nature of social institutions and processes and cannot be a unity, but it is widely dispersed and divergent. They contend that the State is one of the numerous social, economic, political and cultural groupings through which man in society seeks to satisfy his numerous needs and promote welfare. Professor Laski, Lindsay, GDH Cole, Mac Iver, Burker, Duguit, and Krabbe belong to the pluralist school of thought.
- 30 Voluntary organisations Yesterday and Today, Published by PRIA, New Delhi.
- 31 PRA (Participatory Rural Appraisal): It is a family of approaches and methods to enable people to share, enhance, and analyse their knowledge of life and conditions to plan, act, monitor, and evaluate; PLA: Participatory Learning and Action; POA: Participatory Organisational Analysis (Robert Chambers).
- 31A See Venn Diagram in References and Explanations.
- 32 Von Braun and Kennedy quoted in "Cash crops in developing countries: The Issues, The Facts, the People" by Simon Maxwell and Adrian Fernando, IDS, University of Sussex, Brighton in World Development Report Vol. 17 No. 11, Pages 1677-1708.
- 33 Quoted in World Development Report Vol. 17, No. 11, Page 1984.
- 34 Bernard O' Bins, In Plantations and Other Centrally Operated Estates, FAO, 1955. Quoted by Dr S. Uma Devi in her "Impact of Plantations on Kerala's Economy with special reference to rubber: Some Historical and Quantitative Aspects".

- 35 Chotti valley is the area comprising midland valleys and small hills in and around Mundakayam. Chotti is a village between Parathode and Mundakayam. The climate of Chotti valley is humid and moist. The rainfall is on an average 4000 to 5000 mm per annum. The first rubber plantations of Mundakayam were developed here. (From personal conversation with K.K Kuruvilla).
- 36 Uma Devi, S. Impact of Plantations on Kerala's Economy with special reference to Rubber Some Historical and Quantitative Aspects, Unpublished Ph.D thesis, University of Kerala.
- 37 K. K. Kuruvilla, a local resident (during personal conservation with the author).
- 38 K. T. Thomas Karimbanal, son of Kunjommachan (during personal conversation with the author).
- 39 Thomas Kolakudiyil (during personal conversation with the author).
- 40 Appachan Kallarackal (during personal conversation with the author).
- 41 Time Line reconstructed by the author with the help of oral history and other pieces of evidence collected through field enquiry.
- 42 Vegetables included tomato and cabbage, imported into the area from far off places like Cumbum in Tamil Nadu. Meat consumption was observed only in one family and that too only once in the week. Fresh fish is a regular food component. Once roads were opened into the colony, fresh fish reached in vehicles into the interior parts of the colony. Four to five persons per vehicle-load of fish reach the area who announce their arrival by yelling out to attract the womenfolk.

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