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**CAPACITY BUILDING OF A TRIBAL COMMUNITY
IN MANAGING NON WOOD FOREST PRODUCE RESOURCES:
MONITORING OF EMPOWERMENT AND SUSTAINABILITY IN NILAMBUR**

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EXECUTIVE SUMMARY

Scattered populations of tribal communities are distributed in the hills of Western Ghats in Kerala within the forest and in the fringes. This is a case study of four small hamlets comprising of Paniya and Kattunaiken tribes in the Pothukal Panchayat in Malapuram district. Several government agencies are involved with development programmes in the tribal areas. The Kerala Forest Department has organized a Tribal Vana Samrakshna Samithi (TVSS) at Vaniyampuzha involving all the adult members of the community.

The objectives of the study include examination of the working of the tribal VSS, its contribution to employment and income generation and also the question of sustainability of harvesting non wood forest produce from the forest. A profile of the community and education status is presented. Issues in capacity building and human resource development among a technologically backward community are discussed. The participatory nature of the tribal VSS organization, its potential and limitations are also analyzed. What needs to be done to enhance tribal welfare and forest conservation is argued out in the report.

1. INTRODUCTION

1.1 Background

The forest policy of independent India which focussed on producing wood as raw material for the wood using industries since 1950s was radically shifted towards conservation in 1980 by the Forest Conservation Act and the National Forest Policy in 1988. Kerala Forest Department, although a late starter, developed its own style of Participatory Forest Management drawing from the Joint Forest Management Guidelines issued by the Government of India in 1990. At the field level, several Forest Protection Committees locally called Vana Samrakshana Samithy (VSS) were formed at the Range level to carry out forest conservation activities involving people living within and adjoining the forests in Territorial Divisions. Within Protected Areas such as National Parks, Tiger Reserves and Wild life sanctuaries, these VSS are called Ecodevelopment Committees. When the VSS consist exclusively of tribal families, they are designated as Tribal Vana Samrakshana Samithies (TVSS). This is a case study of a tribal community living within the forest with a tradition of forest dependence. This case study looks at one such TVSS at Vaniampuzha in Nilambur Range of the Nilambur North Forest Division in Malapuram District of Kerala. It follows a previous study on rehabilitation of degraded forests by Kerala Forest Research institute (Kallarackal *et al*, 2005).

The location

Between the State Seed Garden Complex at Munderi and the Plantation Corporation Kerala (PCK) rubber plantation deep inside the Vaniampuzha forests, three hamlets of Paniya tribal people reside. Beyond the PCK plantation a hamlet of Kattunaikens is located. All four hamlets together comprise the Vaniyampuzha Tribal VSS. The hamlets are across the Chaliyar River which can be crossed on foot for nearly eight months and during the remaining period they used bamboo rafts

The disease profile of the community as described by Dr. Riyas at local PHC is anaemia and worms. Liquor related problems are also quite widespread. Cancer is not uncommon in the hamlet. The local PHC has three doctors and facility for 15 in-patients. The people of Vaniyampuzha prefer to go to taluk hospital at Nilambur for in-patient care. They avail medical services at Nilambur government hospital which provides them in-patient care and medicines. The Integrated Tribal Development Project (ITDP) office in town reimburses transport costs to and from the hospital in case of seriously ill patients. There is an Ayurveda dispensary quite near to their settlement which stocks sufficient medicines which are free to the tribals, however none ever avail such treatment facility.

The Malapuram District to which Vaniyampuzha belong has an active palliative care network run by NGOs. The Nilambur FDA has donated an ambulance to one of them, a trust called '*Santhvana*' based at Edakkara, in a public function attended by the Minister of Forests in 2012. It is a healthy sign that the VSS and the FDA are addressing larger community problems and interacting with other agencies doing humanitarian work.

The original proposal was submitted with the anticipation of a large budget that could enable carrying out of a capacity building programme in the community by KFRI. However, since the Forest Department already had an ongoing programme for participatory forest management at the site, a scaled down budget was called for and approved. The original title and objectives are retained with the intent of addressing capacity building issues in a broader perspective and to review the efforts of other agencies that carry out such activities at the study site and similar areas.

1.2 Objectives

1. To study the working of the Tribal Vana Samrakshana Samithy at Vaniampuzha.
2. To study the sustainability of Non-wood Forest Produce (NWFP) resource in the forests.

3. To facilitate human resource development in this neglected community and,
4. Assess the changes in income and quality of life of the community and develop a participatory monitoring and evaluation framework for similar activities.

1.3 Methodology

Household surveys were conducted to collect socio-economic data including status of literacy, education, employment, among other in all the hamlets. The household surveys were actually census survey covering the entire community, so no sampling methods were necessary. Regarding population and family size, the data relating to 1994 is from a survey conducted by the Kerala Forest Department and compiled by KFRI (KFD-KFRI 1994). The data of 2008 is based on the survey conducted by ITDP. The data of 2012 is based on the new socio-economic and caste survey conducted by the Forest Department in 2012 and also the register maintained by the Anganwadi teacher Zakeena for the ICDS.

The basic strategy was participant observation in their day-to-day activity, during their NWFP collection activities, VSS general body meetings, medical camps, training programmes and fire awareness meetings conducted by the Forest Department. A few FDA meetings were also attended to observe the proceedings and interactions between the officials and Presidents of the different VSS units. Individual interactions with TVSS members, forest staff, local traders, and officials from different government departments were used to collect information. General Body Meetings of the TVSS were made use of to understand the collective sentiment regarding local issues of community development and forest produce collection. Meetings were also organised by KFRI in the study area for better interaction and assessment of sustainability of forest produce harvesting.

The activities of the TVSS at Vaniyampuzha were the focus of the study. The Forest Department's role in creating the TVSS, organizing community meeting and preparing the Micro Plan was closely observed. The process of implementation of the Plan, its achievements and impacts were assessed through interactions with

the community members and the executive committee members of the TVSS. The activities of other government agencies like Tribal Welfare Department, the Intensive Child Development Scheme (ICDS), running the *anganwadies*, the Education Department managing the Alternate School, the Local Self Government institutions such as, the *Grama Panchayat* and *Block Panchayat*, which support the employment guarantee scheme and provide funding for infrastructure such as roads, bridges and housing were observed and the officials involved with these activities were interviewed at different points of time throughout the study period to gather information regarding their plans, activities and attitudes.

2. COMMUNITY PROFILE

2.1 Hamlets, Community, Population and Family

Table 1 shows the population, number of families and family size in 1994, 2008 and 2012. In the Iruttukuthy, Vaniyampuzha and Tharippapotti hamlets the inhabitants belong to the Paniya tribe and that in the Kumbalapara hamlet, they belong to the Kattunaiken tribe. The Vaniyampuzha hamlet is the largest with 144 people and Kumbalapara is the smallest with 59 people. Number of members in a household is 5.1 on the average in 2012, while that in 1994 was 6.9. This indicates that many of those who lived as a joint family have adopted the nuclear family type in the subsequent period. The expansion of government housing has hastened the shift.

2.2 Housing

Table 2 shows the type of houses in different hamlets. Of the 80 families, 68 have houses and another 12 families are awaiting the construction of new houses to move into while staying with their relatives. Of the 68 houses, 30 have concrete roof, 17 are tiled, 20 have thatched/plastic sheet roof and one has an asbestos roof.

Most government agencies providing funds for house construction for the tribal households insist that there should be no contractor in the building construction and the payment is made directly to the beneficiary house owner. In actual practice, the specifications of the government require materials to be brought from outside the hamlets and also masonry and carpentry skills that are not available within the tribal hamlets, so that a contractor is inevitable. Influential contractors who have a long standing relationship with the government agencies manage all the approvals and paper work in the government offices and involve the beneficiary or householders only as a messenger to cash the cheque in his name at the bank and handover the money to the contractor for a small commission. The Tribal Promoter may also get a small commission for facilitating the procedures. The traditional tribal houses were built with local materials and local skills whereas the government design is of a different nature. However, the more solid type of construction provides more safety for the family during visits of wild elephant herds. Earlier, all the members ran away during such occasions to

save themselves. Casualties still do occur; 65 year old Valiya Vellan was killed by an elephant while he was staying at the adjoining Thandankallu Paniya colony with his relatives.

The government sponsored houses have toilets only in name. Even when squatting type commodes are provided, no septic tank or proper sewage management system exists. Electric lines have reached Vaniampuzha settlement a couple of years ago. Ten houses have been connected to the power grid. In the other colonies some solar lamps have been provided by the government. Solar lamps have a short life span. Indoor plumbing is not provided to any houses. Even when wells exist they are common to all households in the colony.

Over the years, as part of the planned development under the Five-Year Plans and as part of the state budget, funds have been allocated to tribal development. They have had its benefits, but its impact on social, educational and political development has been meagre. Much of the money spent on tribal development has enriched the contractors building roads, houses and other infrastructure for the tribals. Most of these constructions use very low quality materials and have poor finish. Several houses with tiled roof have been badly damaged due to the use of firewood quality wood, instead of durable timber. In a way, the shift towards concrete roof for government housings overcomes such problems. The local complaint of shallow foundation, poor workmanship and low quality materials do not reach the higher authorities since, on paper, the house has been built by the beneficiary householder himself. Now if there is a complaint the fault is on the beneficiary. Most of the road building work has benefited outsiders' access into the tribal areas as they own the vehicles or have the resources to hire them. The tribals on the other hand travel by foot and they have limited opportunity to utilize the benefit of a road which is essentially for wheels. Beyond physical infrastructure it is the investments in human development such as in literacy, education and skill development that empowers the community; comparatively such investments have been quite marginal.

Efforts at providing piped water supply to some hamlets have been undertaken by different Departments during the last decades. These rely on gravity flow from an upstream source. The lack of maintenance has resulted in the collapse of the system within a short while. Some wells have also been dug by different government agencies in different locations. Here again only a few of them are

currently in use, again due to lack of maintenance or necessary finishing works such as installation of a cross beam and pulleys, buckets and rope etc.

Table 1. Number of families, family size and population and in each hamlet

Hamlet (Tribe)	Eruttukuthi (Paniyans)			Vaniampuzha (Paniyans)			Tharippapotti (Paniyans)		Kumbalappara (Kattunaikens)			All hamlets Total		
	'94	'08	'12	'94	'08	'12	'08	'12	'94	'08	'12	'94	'08	'12
No. of families	10	19	23	11	27	27	17	17	6	12	13	27	75	80
Population	64	101	117	63	139	144	70	90	60	53	59	187	363	410
Average family size	6.4	5.3	5.1	5.7	5.1	5.3	4.1	5.3	10.0	4.4	4.5	6.9	4.8	5.1

Source: 1994 KFD survey; 2008 ITDP survey; 2012 ICDS, KFD, KFRI surveys

Table 2. Housing at Vaniampuzha

Hamlet	No of Families in 2012	Type of Roof				Families awaiting new houses
		Concrete	Tiled	Shed	Asbestos	
Eruttukuthy	23	10	4	7	-	2
Vaniyampuzha	27	6	13	3	-	5
Tharippapotti	17	8	-	5	1	3
Kumbalappara	13	6	-	5	-	2
Total	80	30	17	20	1	12

Table 3. Gender and Age Profile of the Population in 1994 and 2012

Age Group	Year	Irrutukuthy		Vaniampuzha		Tharippapotti		Kumbalappara		All Hamlets		
		M	F	M	F	M	F	M	F	M	F	Total
0-5	1994	8	7	8	7	-	-	3	8	19	22	41
	2012	13	11	8	19	14	15	8	4	43	49	92
6-15	1994	7	9	7	8	-	-	9	10	23	27	50
	2012	17	15	18	26	10	11	6	11	51	63	114
16-65	1994	16	14	14	16	-	-	12	15	42	45	87
	2012	27	27	39	33	16	20	13	16	95	96	191
> 65	1994	1	2	1	2	-	-	3	0	5	4	9
	2012	3	4	1	0	3	1	1	0	8	5	13
Total	1994	32	32	30	33	-	-	27	33	89	98	187
	2012	60	57	66	78	43	47	28	31	197	213	410

M-Male; F-Female

Table 4. Employment profile in 2012

Hamlet	Total Population	Working Population	Forest Dependent*		Outside work*		
			NWFP	Firewood	Agri	Noolputtu	Other
Irrutukuthy	117	43 (37)	11	13	13	8	6
Vaniampuzha	144	39 (27)	22	0	12	17	1
Tharippapotti	90	20 (22)	16	0	7	0	4
Kumbalappara	59	21 (36)	20	0	5	0	1
Total	410	123 (30)	69	13	37	25	12

* -Those going for outside work also go for seasonal NWFP collection, so figures do not tally.

()-Figures in parenthesis represent percentage of total population

2.3 Gender and Age Profile

The gender and the age profile of the population in the four hamlets during 1994 and 2012 are given in Table 3. In 2012, there are 213 females to 197 males. In 1994 the ratio of female to male population was slightly higher than in 2012. The number of people above the age of 65 in 2012 is 13 with higher representation of males than females. However the proportion of people above 65 is lower in 2012 than in 1994, indicating a decline in longevity. The population below 15 years is 206 in 2012 and the proportion of young people in the population and the gender balance does not differ from that of 1994. In the age group of zero to five, the decline in the proportion of females to males is striking in the case of Kumbalapara hamlet. In the Vaniyampuzha hamlet the number of females in the age group zero to five is more than double that of the males. Why this is so needs to be examined.

2.4 Employment

Table 4 shows the employment profile of the people in the four hamlets. Out of the 410 members in the community, 123 persons representing 30 percent are engaged in one or the other economic activities. Among them 82 persons, representing 67 percent of those employed are dependent on forests. 69 persons are seasonal collectors of MFP and 12 make a living out of cutting and selling firewood. Selling of firewood collected from the forest to the local tea shops and restaurants is the only source of regular income for the poor women who seek a livelihood. Their poverty makes them shabby dressed and their lack of education makes them unaware of their rights and unable to insist on any such rights by availing the services of the various government departments and agencies or to appeal to them in case of harassment by traders, contractors or any other non tribal. Their lack of political organization and their insignificance as a political force even within a Panchayat ensure that mainstream political parties do not consider them worth supporting. The tribals in the area have no confidence to approach even police stations with a complaint against non tribals since they believe that functionaries of government departments are prejudiced against them.

Those engaged in collection and sale of firewood are all from Iruttukuthy hamlet and they are all women mainly from a single family. The location of Iruttukuthy, being closest to the small town of Thamburatti kallu where a few tea shops exist provide such an opportunity. Forest dependency is highest in the case of

Kumbalapara hamlet where 95 percent of those employed depend on NWFP collection, particularly honey for their livelihood. Since NWFP collection is a seasonal activity, most of those engaged in that activity also go for outside work during the rest of the year.

Whatever income they get seasonally from sale of NWFP or from outside employment has not accumulated as assets created within the home or in their small compounds, it has gone into purchase of the base necessities of food and clothes and any surplus has gone into consumption of liquor which has pervaded the entire community and it is reported that inebriated parents share it with young children and even infants. In a way, unless someone within the community or a small group within them brings about a radical awareness of the dangerous predicament facing the community, with an enlightened plan of action to steer the community to a more healthy and responsible way of life, the future indeed is bleak.

Casual work as agricultural labourers in the private plantations and farmlands outside the hamlets provide seasonal employment to 37 persons, of whom 13 are from Iruttukuthy. There used to be four regular tappers in the public sector Plantation Corporation of Kerala (PCK) rubber plantation. They are all retired now and most of the plantation area has been clear felled and replanted during 2010-11. Up to eight persons now get employment at PCK as temporary watchers to guard the plantation against wild elephants.

There is a tradition that the Paniya settlements in Vaniampuzha are descendants of elephant mahouts employed by Nilambur Kovilakam for dragging timber towards the river or for use during temple festivals. The last of such mahout died last year. He is the father of Raghavan in Vaniampuzha.

During the NWFP season when the collectors have cash in hand they go to town and spend it all on booze or bootleggers and recently, resellers of liquor from the Beverages Corporation sales outlets at a good margin. Action against such clandestine trade is often ineffective.

A more recent phenomenon is the migration of young men to cities as far way as Thiruvananthapuram and Kannur to work in a specialized food production ventures started by a non-tribal family at Kodalipoyil in the Nilambur area. The activity is the production of rice noodles (Noolputtu) to be supplied to hotels and catering establishments. It is a manual production process employing three or

four persons working through the night to produce steaming breakfast early in the morning. Those who take up such employment return to the colony once a fortnight or a month with the savings during the period. The wage is Rs. 200/- a day. The workers are provided with accommodation by the employer. Most of them are from Vaniyampuzha. Around 25 persons are engaged in such work. The other employment avenues are as *anganwadi* helpers and house maids in the non tribal areas.

During the past one and half decades, some agricultural activities were initiated in all the settlements due to the support from the Tribal Welfare and Agriculture Departments. Banana, coconut, areca nut, jack, pepper etc. were planted in all settlements. However seasonal depredations by elephant herds have decimated their crops several times.

The first set of students who reached high schools did not complete their SSLC due to various reasons. None of them got any employment even as a last grade employee in the government service. All of them studied outside the settlement and stayed in far away hostels; some of them in Navodaya schools also. Their status as unemployed youth going about their traditional life style of NWFP collection, or else, daily wage agricultural labourers in some plantation outside the settlements was perhaps a de-motivating factor for other parents and children in that colony. The benefit of education was not directly appealing. However it is from this group that was utilized in the formation of VSS and in managing the collection of NWFP directly under the VSS replacing the agents of the Kalkulam Society. The Second set of learners have reached the secondary level and will surely exceed the educational attainments of predecessors and stand a better chance for regular employment in the mainstream society or to assume leadership roles within the community.

The contractor building houses for the tribals with the funds from the Tribal Welfare Department or other government agencies employed men from Vaniyampuzha as construction labourers in other areas too. The contractor used to provide transport to and from the colony in his mini lorry for this purpose. However, the State Seed Garden Complex, through which the road passes, has enforced their rule of not allowing private vehicles after 5 PM unless it is a medical emergency so this service or such employment is no more available.

The people of the Kumbalappara hamlet almost exclusively depend on forests for their livelihood and sustenance. Other than the income they get from honey

collection during the season, they live on the fish from the streams and wild tubers from the forest. One member is employed as a tribal promoter by the Integrated Tribal Development Project (ITDP) and one lady was employed as helper in the Anganwadi run by the Samakhya NGO. Among the four settlements, the Tharippapotti hamlet had the largest extent of cultivation, since it was fairly open, cleared for making nurseries by the PCK earlier. Their agriculture mostly plantains, was almost entirely destroyed by wild elephant and boar during the last decade.

3. HUMAN RESOURCE DEVELOPMENT

3.1 Education status

There are a whole range of schools that cater to tribal population. The first type is the Alternate School, like the one in Vaniampuzha which is a single-teacher school within the tribal settlement mandated to teach students from Class I to IV simultaneously. Often it is a single room affair when the teacher is expected to teach all the different aged students' different levels of educational material like a grand master of chess playing rapid chess simultaneously with 20 or 30 different players. As mentioned earlier, the teacher is expected to cook and serve breakfast and lunch to the students, fetch water and firewood, clean the premises and bring the allotted quantity of rice, pulses, oils and other materials from wherever it is supplied by the government, in spite of all these handicaps and this scandalously low wages paid to the teachers, it is a great boon to the children since the school is accessible to the small children, and in the absence of this, many children would have been left out of the educational stream altogether.

The next level of schooling is the primary schools both in the government and private sector outside the settlement. Students from the tribal community can get admissions to them and study there. However the distance from their settlement is an inhibitive factor for the parents to send their children to such schools unescorted. It is difficult to regularly escort the children up and down walking long distances through the forest and spending a lot of time in the process. The absence of travel facility like a school van reaching the tribal hamlets is a major difficulty. The local primary schools have children of other communities who have educated parents and come from an economic class much above the poor tribal students. While the students attending the Alternative School could attend the class as they are or with the uniforms provided by the ITDP, in the local schools the local children come with more sophistication and expensive attire that leaves the tribal child shabby dressed, without footwear and unable to keep up with other students due to the lack of parental support with the educational curriculum naturally this affects the self-esteem and performance of the students in the class. Although it is unknown in Kerala, expensive private schools in urban

areas when compelled by the Right to Education Act to admit less affluent local students have resorted to harassment such as the scandalous hair clipping incident in Bengaluru.

The third level is the middle school which also provides hostels at least for the girl students from the tribal community. These who reach that level and survive the schooling up to that level, try their best to continue. The mutual support of the students in the hostels enables them to share their problems and persist in spite of the difficulties. The hostels are mostly over crowded and the infrastructure facilities are extremely limited. Rarely does the number of toilets match the requirement of the strength of the students and the water supply may not be continuous. Yet the available facilities are well utilized by the highly motivated students who reach that stage overcoming all their deprivations and handicaps.

Most of such middle schools are in fact high schools teaching up to tenth standard. The students reaching there, particularly the girls, continue up to the tenth standard without much dropout. Their loneliness from being away from home in hostels is offset by the company of their peer group and also of the fact that dropping out from schools and returning home provide little consolation, due to the prevalence of the liquor culture and the lack of opportunities which boys of their age class have. There are exclusive *Asramam* (Residential) schools for the tribals at various places. It is here that most of the motivated boys study. The *Asramam* Schools are up to the Class 10 level. They are quite some distance away from Vaniampuzha and the children attending schools come home only the during the vacation periods of Onam, Christmas and summer holidays.

The change in education status between 1994 and 2012 is shown in Table 5. While only 9 per cent of the population have ever enrolled in a school in 1994, the percentage has increased to 46 in 2012. It does not mean that the 46 percentage of the population completed primary school; some of them may have dropped out immediately after enrolment or along the way. In the survey conducted in 1994, only two percent of the population went beyond the fourth standard in school while in 2012 the percentage has risen to 27. Those who have reached the high school in the 2012 survey were only nine percent and those who completed the tenth standard or SSLC are only one per cent.

Table 5. School enrolment and educational exposure in each hamlet

Hamlet	Eruttukuthi		Vaniampuzha		Tharippapotti	Kumbalappara		All Hamlets		
	1994	2012	1994	2012	2012	1994	2012	1994	2012	
Population	64	117	63	144	90	60	59	187	410	
Ever enrolled in school	8 (13)	68 (58)	8 (13)	84 (58)	28 (31)	0 (0)	8 (14)	16 (9)	188 (46)	
School Class	1-4 #	8 (13)	66 (56)	8 (13)	83 (57)	28 (31)	0 (0)	6 (10)	16 (9)	183 (45)
	5-7	1 (2)	41 (35)	3 (5)	56 (39)	13 (14)	0 (0)	0 (0)	4 (2)	110 (27)
	8-10	0 (0)	16 (14)	1 (2)	21 (15)	1 (1)	0 (0)	0 (0)	1 (1)	38 (9)
	11-12	0	2 (2)	0	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	3 (1)

(%) – Figures in parenthesis represent percentage to total population in the hamlet.

- Dropouts in Class1 has been excluded.

The Vaniyampuzha hamlet has consistently shown a better performance than other hamlets in the study area. The location of the Alternate School at Vaniyampuzha has definitely contributed to the better performance of this hamlet, considering the fact that it is more inaccessible than Iruttukuthy, which is closer to regular schools outside the hamlet. The Kumbalapara hamlet, which is deeper inside the forest, shows the lowest achievement in the case of education. This situation is being corrected now with students from Kumbalapara being enrolled in the Indira Gandhi Memorial Model Residential School (IGMMRS) in Nilambur established exclusively for the five 'Primitive tribes' of Kerala which includes the Kattunaikens. Currently five girl students are enrolled in the IGMMRS at Nilambur.

There are around 10 such schools in different parts of Kerala. These schools admit students from five primitive tribal communities. The Paniya community has not been included under the primitive tribal category so that students from Vaniyampuzha Paniya colonies cannot get admission in that school. They have to

go to other residential schools in the neighbouring districts of Waynad or Kozhikode. It was reported by the ITDP officials at Nilambur that the Paniyas in Nilambur belong to the Kattupaniya group who have no tradition of agriculture and show the characteristics of a primitive tribe, unlike their kin in Wayanad who are agricultural labourers. It is ideal that students from the Paniya community at Vaniampuzha and elsewhere in Malappuram District belong to the Kattupaniya group are included under the primitive tribal category or at least made eligible for admission to the IGMMR School. Good facilities, spacious play ground and hostels for girls and boys are provided in the school. The teachers come from the regular education department stream. There is a Director who comes from the Tribal Welfare Department acts as an overall manager dealing with non academic matters. Some officers of the Tribal Welfare Department feel that the Tribal Welfare Department should have a greater control over the transfer and posting of teachers in the schools, and that some teachers opt to come to the school for a convenient posting and not with the genuine motivation of helping the tribal students. The teachers may have a different opinion regarding the attitude of the Tribal Welfare Department.

As with the case of exclusive isolated colonies of tribal hamlets, exclusive schools for tribal students have their merits and demerits. In a personal interview, a teacher made the remark that the academic standard of the school will rise if students from mainstream society are also admitted in a small percentage in each class. The Navodaya pattern is a good example to emulate.

An NGO named 'Samakhya' based at Nilambur had established an Anganwadi at Kumbalappara colony, as part of a central government funded scheme. It is not currently functioning. The teacher was one Mohanan from a neighbouring Paniya colony. A new single-teacher "Peripatetic School" has been opened by the ITDP this year at Kumbalappara cater to the children from 5 to 12 years who are not attending school. The teacher is a girl (Ammini) from the Irruttukuthy hamlet who has studied up to plus 2 but failed to pass. The salary is Rs 3000. The school is similar to the Alternate School run by the Education Department at Vaniampuzha.

Table 6 shows the number of current students in each hamlet. At the secondary level there are only two students and both are girls. At the high school level there are 16 students of whom 10 are girls and six are boys. In the upper primary level there are 30 students and in the primary level there are 35 students. There is a

consistent pattern among current students, of girls exceeding boys at all levels of school education. Kumbalappara is a late starter in education and the highest level of educational attainment is the second standard in the primary school. Vaniyampuzha with 39 students is the topper among the four hamlets where 24 girls are among the current students which include eight students in the high school and secondary category. Iruttukuthy follows Vaniyampuzha in the number of current students.

Table 6. Class wise distribution of current students in each hamlet in the age group 6-17 years

Population and School Class	Eruttukuthi		Vaniampuzha		Tharippapotti		Kumbalappara		All Hamlets		
	M	F	M	F	M	F	M	F	M	F	M&F
Total Population	18	18	19	28	10	12	6	12	53	70	123
Class 1 - 4	3	6	7	4	3	7	0	5	13	22	35 (42)
Class 5 - 7	6	4	6	12	2	0	0	0	14	16	30 (36)
Class 8 -10	4	3	2	7	0	0	0	0	6	10	16 (19)
Class 11-12	0	1	0	1	0	0	0	0	0	2	2 (3)
All Classes %	13 (48)	14 (52)	15 (38)	24 (62)	5 (42)	7 (58)	0 (0)	5 (100)	33 (40)	50 (60)	83 (100)
Total M&F All Classes	27 (33)		39 (47)		12 (14)		5 (6)		83 (100)		

(%) – Figures in parenthesis represent percentage; M-Male; F-Female; CS-Current students

The pattern of dropouts at different levels of schooling and their gender profile in the different hamlets among the age group 6 to 17 is shown in Table 7. The vast majority of the dropouts (88%) are at the primary level in classes 1-4. At the upper primary level there is a dropout of 10 percent and in the high school level two percent. Those entering the secondary level manage to complete the course.

Table 7. Distribution of dropouts in each hamlets in the age group 6-17 years

Population and School Class	Iruttukuthy		Vaniampuzha		Tharippapotti		Kumbalappara		All Hamlets		
	M	F	M	F	M	F	M	F	M	F	M&F
Total Population	18	18	19	28	10	12	6	12	53	70	123
Class 1-4 [#]	2	3	4	4	5	4	6	7	17	18	35 (88)
Class 5-7	3	0	0	0	0	1	0	0	3	1	4 (10)
Class 8-10	0	1	0	0	0	0	0	0	0	1	1 (2)
Class 11-12	0	0	0	0	0	0	0	0	0	0	0 (0)
All Classes %	5 (56)	4 (44)	4 (50)	4 (50)	5 (50)	5 (50)	6 (46)	7 (54)	20 (50)	20 (50)	40 (100)
All Drop Outs	9 (22)		8 (20)		10 (25)		13 (33)		40 (100)		

- Those never enrolled are also included as Dropouts in Class 1-4

(%) – Figures in parenthesis represent percentage; M-Male; F-Female

Table 8 shows the distribution of current students and dropouts in the age group of 6-17 years in each hamlet. Of the 123 children in the age group of 6-17, 83 (67%) are currently studying at various levels of schooling and 40 are dropouts. The dropout level is lowest in Vaniyampuzha with only 17 percent dropout compared to 25 per cent dropout at Iruttukuthy, 45 in Tharippapotti and 72 in Kumbalappara.

It is quite recently that students from the hamlets have passed out from the tenth standard. Currently there are a few girls in the secondary school outside the settlement. Only one girl from the Iruttukuthy hamlet in the entire study area has passed the plus two level. Surprisingly both her parents are uneducated. However, both of them are employed in the government sector with the father as a regular tapper at the PCK rubber plantation and the mother as a helper in the Anganwadi at Vaniyampuzha hamlet. The student, M.S. Bindu joined a government nursing school at Kollam but soon discontinued the same and is now staying idle or helping her mother.

An interesting case of a child from Irrutukuthy settlement admitted to the Dr. Ambedkar Vidhya Nikethan at Palole, Thiruvananthapuram, in the First standard is

currently in the eighth standard and doing well. He is the son of Ramakrishnan, the Tribal Promoter, who studied in the Navodaya Vidyalaya. The Dr. Ambedkar Vidhya Nikethan is a fully residential English medium tribal school following the CBSE syllabus and it is run by the Tribal Welfare Department exclusively for tribal students. The manager of the school comes on deputation from the Tribal Welfare Department but the teachers are all on short term contracts and it is reported that they are not even paid salaries during the annual summer vacation. This feature, if true, may handicap the school since high school teaching require dedicated and experienced teachers who may not be attracted by such terms of service. This school is the only one of its kind in Kerala.

More of such schools located near all major tribal settlement would offer an alternative to parents who wish to give the children a competitive edge in the highly competitive employment market and also to provide sufficient capability in English language in which all professional courses including the traditional Ayurveda is taught in Kerala. One reason for the fall in the number of students admitted to government schools is that most of them offer only Malayalam medium curriculum. Parents in the mainstream society, including the poor, patronize the more expensive schools offering English medium education, despite the fact those teachers in government schools are more qualified, more experienced and much better paid. The perceived advantage of English medium education for the competitive examination for higher study and for the employment is the reason for the preference, while the mainstream students gain such advantage the tribal students should not be deprived of such opportunity in an increasingly competitive globalized world.

For Kerala, the next logical step forward should be to establish tribal schools on the pattern and model of the Navodaya school network. While the Navodaya schools focus on the rural population, these tribal schools should essentially cater to the students of the tribal community and admit students from the general community after admitting the tribal applicants. Teachers in such schools should not just be paid at par with teachers in regular school but should be paid substantially higher as the faculty at the IITs are paid a higher salary and perquisites than that in regular government engineering colleges. With such focused and innovative investments in education, the tribal population could be fast tracked to catch up with their more privileged peers availing all kinds of investments in infrastructure and services during the last six decades since independence.

Table 8. Number of current students and dropouts in each hamlet in the age group 6-17 years.

School Class	Eruttukuthi			Vaniampuzha			Tharippapotti			Kumbalappara			All Hamlets		
	CS*	DO*	Total	CS	DO	Total	CS	DO	Total	CS	DO	Total	CS	DO	Total
1 - 4	9	5	14	11	8	19	10	9	19	5	13	18	35	35	70
5 - 7	10	3	13	18	0	18	2	1	3	0	0	0	30	4	34
8 - 10	7	1	8	9	0	9	0	0	0	0	0	0	16	1	17
11 - 12	1	0	1	1	0	1	0	0	0	0	0	0	2	0	2
Total	27 (75)	9 (25)	36 (100)	39 (83)	8 (17)	47 (100)	12 (55)	10 (45)	22 (100)	5 (28)	13 (72)	18 (100)	83 (67)	40 (33)	123 (100)

* CS - Currently Studying; * DO - Drop Out; * (%) - Figures in parenthesis represent percentage

* Dropout in class 1-4 includes those never enrolled in a school.

break out of their debt. It is possible that they are being cheated both in the price of materials exchanged and also in book keeping. Even otherwise, it is advantageous for the traders to continue the relationship as a creditor since it bestows power and influence over the tribal and the forest produce he collects from the forest. The situation of liquor addicts in that situation is hopeless. Outsiders, particularly those who provided credit to the tribals can exert extraordinary power over the tribals who can be manipulated or threatened to do the bidding of the creditor, even to sabotage of the activities of the Vana Samrakshna Samithies (VSS).

4. PARTICIPATORY FOREST MANAGEMENT

4.1 PFM and activities of the Tribal VSS at Vaniampuzha

The forest policy of India mandates Joint Forest Management (JFM) for the conservation of the forest and welfare of the forest dependent people. JFM is qualitatively a higher form of participation in which control over decision making and sharing of benefit, even to the extent of 50 percent of the value of the produce can be claimed as the share of the members of the JFM community. In Kerala, JFM has never been attempted what we have adopted is only Participatory Forest Management (PFM) where the control over decision making is marginal and the modality of benefit sharing is vague. One reason for the change from the national prescription is that the forests of Kerala are rich in timber, biodiversity and plantations of valuable species like teak, which has had a continuous history of expansion for more than one and a half centuries. The Kerala Forest Department naturally wanted no ambiguity regarding the ownership of existing plantations raised by the Department, in case a new VSS organized in the vicinity of a teak plantation, laid claim to half the value of the final felling timber. NWFP resources in the forest were allowed to be collected free of charge by the tribals and others living inside the forest through the agency of the State Harijan Girijan Federation, which has regional offices and collection centres in all major forest areas. The Forest Department kept control over the removal of such produce through the issue of transit passes by the Range Officer. Now that the monopoly of the Federation in the collection of NWFP has been lifted, the VSS is free to market the same which ever way they wish. However, the local Beat Forest Officer, as secretary of the VSS, controls the collection of NWFP, applies for transit pass and takes decision on the marketing of the produce. The Federation is still very much active and they continue to collect NWFP from the VSS. Often it is convenient for the VSS to supply to the Federation than sell it to local traders. It is those items that the federation does not collect that are sold to private traders by the VSS. Honey is the most valuable item collected from the forest and the Forest Department has initiated programmes to bottle and market honey with the Forest Department Agency (FDA) label from outlets near eco-tourism centres and Forest offices. It is interesting to note that the income of the collectors do not substantially change with the change in the agency that market NWFP.

Participation of the tribal population is in the nature of attending occasional general body meetings, or in the case of the executive committee, monthly meetings in which decisions of the VSS are recorded. Their original status as mere collectors of NWFP, continue without change even after the formation of the VSS. The radical change is that, while earlier they had to comply with the demands or orders of the agent or subagent of the Harijan Girijan Federation, who invariably was a private trader engaged in the activity before the Federation established their monopoly in the area, now they have a Beat Forest Officer as Secretary who is in overall charge of the collection, and the President who is the member of the local community to whom they can complain or interact. Further the weighing of the produce and account keeping is done by a designated store keeper, usually one of the members of the executive committee of the VSS. This procedure ensures transparency and reduces the cheating involved in recording the weights, which was prevalent in the earlier phase. Beyond this participation has no more meaning to the tribal community.

While the collection was organized by the agent or sub-agent of the Federation, the tribal collectors received the notified price for each item. The transportation charge from the forest collection centre to the Federation's depot was borne by the Federation. After the emergence of VSS, the transport charge is not reimbursed by the Federation and so the tribal collectors get a price lower than the notified price as transportation charge is now borne by the VSS.

To the Forest Department, the formation of the VSS is an advantage since the responsibilities of forest protection, fire prevention and resource conservation in a specified area, which was earlier entrusted to a Beat Forest Officer or a Forest Station, is now made the collective responsibility of the VSS. The VSS Secretary who is the Beat Forest Officer attached to the local Forest Station has formal contact with a wide circle of community members who are valuable sources of information and who can be called upon to supplement the manpower available in a Forest station, in case of an emergency or a forest crime. Reciprocally the community members also can have frequent contacts with the Secretary, whom they can approach to solve their problems.

Other than the routine NWFP collection and the income there from, which was available to the tribal community for generations, the VSS has enabled employment creation in the form of planting of seedlings of mixed tree species or canes inside forests and their maintenance two or three years afterwards through

the funds obtained from the National Afforestation programme (NAP) of the Ministry of Environment and Forests, Government of India.

While it lasted, the NAP funding generated employment and income to the VSS members. When the programme ended such activity also ended. Employment is now available from the Panchayat under the Mahatma Gandhi Rural Employment Guarantee Scheme (MGREGS) which guarantee 100 days employment to all those who register with it. These programmes were scheduled during the monsoon season when historically there was neither employment nor income. The wages under MGREGS has helped overcome hunger during those critical months.

Indirect benefits have also followed the formation of VSS in many places. The General body meetings in tribal settlements invariably involved provision of lunch to the participants and the presence of forest officials. Common grievances such as need for electricity connections, water supply, housing as well as bridges across streams or rivers were regularly made and these collective demands were eventually satisfied by the Forest Department or through their initiative, by the Panchayat or other agencies.

Participation in the PFM context in India is, sharing in the responsibility of forest protection by the tribals and the local population, and availing some employment benefits which were not there earlier. However, the formation of VSS has created a local forum where local issues could be discussed and a social institution which could be energized to solve local problems. As the VSS have been formed, in the vast majority of cases, by the initiative of Forest Department to meet certain official targets, and since the chief executive, the Secretary is an official, the character, motivation and vision of that individual determines whether the VSS functions effectively or goes into hibernation. As the VSS Secretary is the lowermost official in the hierarchy any success can materialize only when others higher up in the hierarchy enable the Secretary to function efficiently or at all. The responsibility of the VSS is an additional duty for the Beat Forest Officer entrusted with it and if the priorities of the Forester above him and the Deputy Range officer in charge of the Forest Station are something else then, VSS activities will suffer. A peculiar situation in the Forest Station is that, while the responsibility for protection of Forest against tree felling, fire and encroachment is collectively shared, the responsibility for the VSS is with the Secretary alone. Earlier, under the Forest Beat System each Beat Forest Officer was personally responsible for a defined area of forest; with the change over to the Forest Station concept such

including Sports Utility Vehicles, such access for recreation or business can within a short time drive all the wildlife to local extinction and seriously deplete the biodiversity. Building of roads inside forest will compromise the integrity of forest and bring in weeds and other invasive species into the forest eco-system and undermine the conservation and environmental value of the forest. Once a road is created a whole stream of service providers from tea shops, petrol pumps, hotels and all other recreational facilities will be established eventually and the land use will be modified either by the people living there or the migrants or the different Government agencies that promote plantations of rubber, coffee, spices, medicinal plants or by agencies keen to develop hydroelectric power or exclusive tourist facilities within the forest. These demands cannot be resisted for long since each of them will have powerful supporters within the Government or outside. Multinational agencies like World Bank, IMF or even multinational corporations can exert financial pressure which the Forest Department or even the State Government may not be able to resist.

In such trying times, a strong, healthy and democratic VSS can be a useful ally for the Forest Department. It is only the tribal community and the people living in the forest for generations who have a long term stake in the conservation of the forest. Outsiders and outside agencies may rush in for short term benefits or for exploiting the resources of a newly opened up area. They may come for profits or recreation. When the resources are exhausted, or when the charm fades or when the environment is degraded, they will leave for new pastures, leaving a ruined forest and degraded landscape behind.

The VSS has raised plantations of cane, bamboo and mixed species in the forest around Vaniyampuzha. Table 9 show the list of plantations, species raised the area. Assisted Natural Regeneration (ANR) is mixed planting of the local indigenous forest tree species often sourcing the seedlings available naturally in the forest. Employment is provided during the planting activity and weeding of the area during the first three years. Since 2008-09, the practice of weeding in the ANR and mixed plantation has been stopped because weeding eliminates healthy seedlings naturally available in the area. Employment is also available as plantation watchers to a few individuals in the first few years. The funding for the plantation raising activities by the VSS has come mostly from the National Afforestation Programme (NAP) of the Ministry of Environment and Forest of the central government. The policy of the NAP to route the funds directly to the

Forest Development Agency (FDA) headed by a Divisional Forest Officer, from which only the VSS could utilize the money promoted VSS activities in such ventures. In fact other than NWFP collection, the only other activity by most VSS in Kerala was limited to raising plantations of cane, bamboo or mixed species within natural forest as an under-storey. Beyond an employment generation activity, the economic benefits from these ventures are yet to be assessed.

Table 9. List of plantations raised by VSS

Year	Location	Area (in hectare)	Species/ Scheme
2005-2006	Tharippapotti	15	Cane
2006-2007	Tharippapotti (Padikkundu)	25	ANR
2007-2008	Iruttukuthy	10	Mixed
2008-2009	Tharippapotti	25	ANR
2008-2009	Iruttukuthy	25	ANR Bit 1
2008-2009	Idivettikallu	25	ANR Bit 2
2009-2010	Kumbalappara (Nellithadam)	20	Mixed
2009-2010	Kumbalappara	10	Bamboo
Total		155	

Table 10 shows the annual expenditure in various PFM activities at Vaniampuzha during 2005-12. We can see that among the activities some are a continuation of traditional forest department activities and others are new or specific VSS related activities. It is the second category that is truly the contribution of VSS to local community employment and income generation. Plantation raising or maintenance is by far the biggest activity. Fire line creation was undertaken in some years. Other items of expenditure include gully plugging in 2008-09 and digging of trench in 2009-10. Digging of trench is carried out mechanically with excavators and no employment is provided in the activity to the community members. Between 2005 and 2012 a total of 21 lakhs has been spend by the VSS at Vaniyampuzha in activities other than NWFP collection.

Table 10. Expenditure on VSS Activities at Vaniampuzha 2005-2012

(Amount in Rs.)

Year	Plantations				Fire line	Other	Total
	ANR	Mixed	Bamboo	Cane			
2005-2006	-	-	-	1,84,227	-	-	1,84,227
2006-2007	1,39,161	-	-	78,032	-	-	2,17,193
2007-2008	79,632	7,119	-	26,777	-	-	1,13,528
2008-2009	2,44,426	1,75,021	-	-	60,918	87,633 (Gully)	5,67,998
2009-2010	1,22,423	1,71,090	57,938	-	50,053	1,14,979 (Trench)	5,16,483
2010-2011	26,636	40,300	13,802	-	2,68,258	-	3,48,996
2011-2012	89,592	40,160	7,888	-	-	-	1,37,640
2012-2013	-	-	-	-	21,767	-	21,767
Total	7,01,870	4,33,690	79,628	2,89,036	4,00,996	2,02,612	21,07,832

During 2009-2010 VSS Office building renovation received Rs.1, 64,523 funding from NMPB

The selection of the forest officers in Kerala and their training is not focused on the individual's capability in social organization or communication. The functions in the field, before the PFM programme was mostly of a bureaucratic nature or imitated the police, in their authority to arrest people, prosecute them and harass them if they so choose. When the Government changed from the colonial mode to the democratic, the mainstream society, with their political empowerment and legal awareness made them confident enough to challenge the authority of the forest officials, if they felt threatened. However, the poor and illiterate tribal people with no political backing still interact with the forest officials in a subservient mode. Although the tribals hold the forest and other Government officials with awe and fear, they do not trust them due to their own past experiences. Public declarations made or promises given by outsiders, including officials either do not materialize or are observed in the breach. It may not be due to the lack of sincerity or earnestness on the part of individual officials. The bureaucratic system require approvals from authorities at different levels and the

expected approvals need not come at all or it may come extremely delayed to be of local interest or for development. A specific case can be mentioned regarding the promise of a bridge across the Chaliar River at Vaniampuzha. The former DFO, made the promise with full faith that her proposal backed by an innovative hanging bridge, would be approved and funds would be forthcoming from the Government. Actually the DFO had taken a lot of interest in the project and utilized the services of two young engineers who passed out of NIT and who were working on a short term contract with the Forest Department of Nilambur, over seeing the construction of Guest houses and other buildings of the Department. The bridge design and drawings were sourced from the senior faculty at NIT using the access of the former students with the faculty, and that too free of charge. It is normal for Government funding to arrive late in March. The DFO waited expectantly till the end of March and unfortunately the funds did not come.

Fortunately for the community, and perhaps due to the activities of the VSS, which involved the then Panchayat President, who lived near Vaniampuzha, at Pothukal and also the local Ward member who subsequently took up the case of the bridge and got the Block Panchayat to approve the funding and construction of a bridge at Vaniampuzha. The bridge was built a couple of years later in concrete, but collapsed totally, even before commissioning, due to a flash flood which brought down floating debris and uprooted trees and destroyed the bridge. The quality of construction may have been poor as with all civil works in the tribal areas. But the real cause most probably would have been an under estimation of the strength of the water current during the Monsoon and the collapse of the foundation of the piers inside the river bed. The original design proposed by the forest DFO was of a hanging bridge kind which did not have any pier inside the river.

A few more years later a new bridge on the same site has been built by the PWD taking care to avoid the mistakes of the past. The new bridge was commissioned late in 2012. The agency which initially made the promise, the KFD, is not the same that built it now.

Another major expectation and promise was the marketing of NWFP collected by the VSS directly, without going through the SC/ST Society at Kalkulam which is managed by officials of the cooperative Department. The monopoly which the SC/ST Federation exercised over the entire state in the matter of NWFP collection could not be breached by VSS or even the Forest Department. It was only much

after the Tribal Rights Acts enacted by the parliament in 2006 that enable the VSS to bypass the Kalkulam Society to which it was bound to supply all the NWFP items collected. Even now the Kalkulam society is functioning and they collect honey and other NWFP from the VSS. However, they cannot insist on getting the entire quality collected since they do not enjoy the monopoly they used to have and the Tribal Rights Act empowers the tribals or their organization to sell their collection to whoever they wish. Here again the promise of independent marketing which was expected to increase the income from NWFP came after about a decade after expectations were raised.

Honey, the most valuable item collected by the VSS is sought to be marketed by the Forest Department's own new agency of Vanasree in outlets near tourist areas or forest offices. The actual experience with the change over from the Kalkulam society to the Forest Department's own Vanasree outlet neither fetches a higher price nor did the VSS get the price promptly on delivery. It took one whole year for them to get the money, and that too long after the honey was bottled and sold by the Forest Department controlled outlet, over which the local VSS had no control. Earlier when the NWFP items were delivered at Kalkulam society, the payment was prompt.

The takeover of the NWFP collection by the Vaniampuzha VSS from the agents of the Kalkulam society it improved the transparency in the operation, it enabled proper recording of the weight measurements of the NWFP items brought in as the storekeeper was a member of the community and the Executive Committee members of the VSS have supervision over the collection centre. It certainly contributed to capacity building in ledger maintenance, account keeping and office procedures. It was the first generation educated members of the community who were entrusted with these tasks. The Kalkulam Society benefited much more than VSS since, then the VSS directly became the collection agent, they could control the leakages, meaning sale of NWFP to private traders who offered a higher price, they did not have to pay a wage or commission to the collecting agent for organizing the collection at the site and more clearly they insisted that the VSS must pay for transportation of the collected material from Vanimpuzha to the Kalkulam Society's office at Nilambur. The net effect is that at the unit price of an item obtained by a tribal collector under the VSS was necessarily lower since the transportation cost and the establishment cost such as

the wages of the store keeper have to be met from the VSS which earlier was borne by the Kalkulam Society.

The Forest Department has authorized collection of nearly 150 different items of NWFP from the forests. The SC/ST Federation collects only those items which they feel have a market and that too, the regional offices such as one in Kalkulam collects a very small list of less than half a dozen items during the season. The prices of NWFP items reflect just the survival wage of the collector; although the medicines and other proprietary items prepared using the NWFP items are priced in a different manner to maximize their profit. The SC/ST Federation or any public agencies that tries to sell these items to the medicine manufacturers or other organized buyers are faced with very low prices since there are parallel channels for these manufactures who can get the same items through private traders who have links with the provision shops and tea shops, serving the tribal population on the periphery of the forest. As the tribals are chronically indebted to local traders, in spite of the best efforts of the VSS leadership, some quantity always reach the traders who either entice them with a marginally higher price or threaten them for repayment of their loans. Another more innovative method is to smuggle the collected NWFP across the boarder to the neighbouring states and bring it back to Kerala with the bills of some agencies as imported material.

As the plant based ayurvedic medicine industry has grown spectacularly during the last several decades, shortage of particular items of raw-materials has resulted in the use of substitutes, import from neighbouring countries and also farm grown produce from other States. In short, the powerful wholesalers of raw medicinal plants and medicinal manufacturers determine the price at which the public agencies or the tribals can sell NWFP. Sometimes the price offered is so low that it is not worthwhile for a collector to go hunting for the same and collect it. Further, the price offered is for the best quality item, the agents and traders invariably give a lower price than what that they declare on the charge that a particular set of items brought to them is not of the highest quality or that it is not fresh or dry enough. Cheating in the matter of weight or in the matter of deducting previous advances may not be a universal practice among private traders. However, the chronic indebtedness of the tribal collectors point to a situation of manipulation of the records if at all they exist.

In sum, the empowerment of the VSS to do the collection and marketing of NWFP from the forest is a very positive milestone in the development of the tribal

community depending on the forest. If it leads to the emergence of a good leadership within the community, who can expose or even challenge the local traders who cheat them and who can organize resistance against sellers of liquor to the community members soon after they get their collection charges, then, it might be the beginning of an empowerment process that can lead the community out of the stagnation and decline they face.

4.2 Expectations of PFM among the community

Communication gap is a normal phenomenon. When it comes to new initiatives and programmes which also involve groups on the periphery of the mainstream society the potential for such gaps are enormous. During the visit to the site in May 2012, a person who was engaged as a watcher for the Kumbalapara plantation earlier complained that he is yet to receive wages for his duties during the last year. He expected to be paid Rs. 25000 as he was paid during the previous two years. On enquiry as to what his duties were and the frequency of his visits to the plantation, he was not quite sure as to what was expected of him. Whether the payment is indeed pending or whether it is due to communication gap is to be clarified.

To motivate people to come forward, promises are made which raise the expectations of the people. However due to a variety of reasons the initial promises do not become a reality or they become inordinately delayed which leads to mistrust, indifference or hostility. The money flow into VSS is perceived as a welfare payment which does not require reciprocal responsibilities or work. So long as the money flow helps mitigate acute poverty, it can be justified otherwise such money flow will encourage laziness and reduce the ability of the recipients to develop skills or competence necessary for productive work. The greater folly is when the actual payment gets delayed and fall into arrears for a long period and the cumulative amount is disbursed in cash at one go. In a community which is yet to develop a savings habit or have a tradition of investing windfall income in asset creation, the entire amount predictability will be squandered on liquor or other frivolous activities.

It may be that the government adopts a strategy of providing fixed assets to the tribal community in the form of housing, water supply, roads or in the form of livestock and agricultural seedlings instead of giving these subsidies in cash. Although it may be seen to be a more rational approach, the leakages in the system and the ease at which corruption can be practiced since the recipients of

these benefits are illiterate and have no means of knowing the terms agreed between the officials and the contractors for supplying these items and sometimes, as in the case of housing, the fiction that the beneficiary is personally building his house without engaging any contractors or middlemen, makes them party to the conspiracy and forecloses any possibility of a complaint regarding materials used, deviations from specifications or poor workmanship.

When the VSS was initiated, the expectation was that the entire NWFP collection and marketing would be carried out by the VSS which will result in higher incomes and more welfare measures for the community. However for a very long period after inception of the VSS, the NWFP products collected continued to be supplied to the State Harijan Girijan Federation at the same price at which they were collected earlier. During the last few years the NWFP items collected were sold to private traders, apart from the Society and the forest Departments own eco shop outlets. This has resulted in realizing a higher price, but supply to the forest Departments outlets invariably results in very long wait for the payments. At one time a full year passed before the VSS could recover the price of honey supplied to the Forest Department's eco shops. Such delays raise the suspicion that a section of the Forest Department staff deliberately tries to wreck the VSS initiative and its activities. The long delay in passing the bills of the VSS at the Range Officer or the Divisional Office should also be seen in the context of the opposition to the idea of participatory forest management among a section of the Forest Department staff. Those officials who are used to taking a commission for processing or passing a bill insist that the VSS bills must also be accompanied by similar gratification. In the absence of such speed money, the bills get stranded and the activities of the VSS get stalled.

When the PFM programme was started in Kerala an innovative system of financial management was conceived in which two funds were at the disposal of the VSS. One was the core fund and the other was the operational fund. A substantial amount of money was provided in the core fund which could be used as an advance or for payments made before the bills have actually passed by the higher officers. From the operational fund money can be withdrawn only for bills that are passed. As and when bills are passed, advances taken from the core fund can be replaced in such a manner that there will be no dearth of money for activities or routine delay of processing bills at the higher officers do not hold up the work of the VSS.

The Forest Department has erected electric fences at Vaniampuzha and Tharippapotti hamlets through the VSS funds. However these electric fences collapsed immediately due to poor workmanship and maintenance. Some forest officers put the blame on drunken misbehaviour by the people in the hamlets for the destruction of the electric fences. But the fact remains that these fences never worked effectively. In some areas trenches were dug using heavy machinery, hired from outside. Even these are of no deterrent value since they are of very short lengths and the elephant herds can come around these.

In spite of such careful planning and guidelines, the entire money in the core fund was advanced for installing electric fence at Vaniampuzha and Tharippapotti colonies. For a variety of reasons neither did the electric fences work, nor did the money advanced for that get replaced in the core fund. The advances for installing the electric fences at Vaniampuzha were made when the Secretary of a neighbouring VSS held additional charge of Vaniampuzha. It should be presumed that along with dedicated and sincere officials who try hard to sustain the VSS, there are opportunists who misuse the freedom and flexibility of the participatory forest management system to undermine the very existence of the VSS and its credibility. One cannot be certain whether these are genuine mistakes of judgment or whether they are deliberate fraud.

The transition from a rigid hierarchical and bureaucratic system, towards a more equitable and flexible system as the PFM programme, calls for a great leap of faith and a changeover from the mindset of mistrust of the bureaucratic system, towards perfect trust and transparency in all dealings between the VSS and the Forest Department and among the members of VSS. Here the Secretary who is the chief executive of the VSS and who maintains all the records and who manages all the accounts has to be a very committed person. He must have the full trust of the members of the VSS and also all officials above him in the forest hierarchy. When such trust and support cannot be assured, the activities of the VSS will fall in limbo.

The VSS, as a concept to empower the tribal community and to ensure sustainable management of the forest resources is a noble one, however in practice, the deficiencies in different aspects have not brought about the expected results during the short period of a decade. The forest department which controls the VSS activities and the personnel involved have treated the PFM programme as a peripheral activity. It is at the Forest Development Agency

4.3 Contribution of PFM to employment

All government activities come with a budget. In the budget for PFM there are activities which are traditionally carried out by the forest department. These are also activities that are totally new. When traditional activities are included in PFM, there is only a shift in budget head and no additional money comes to locality. However, even then, money flow into the community may be enhanced since the mode of operation in the traditional methods is the convenor based system of labour contract. This may or may not benefit the local community. In the VSS mode of operation the workers are invariably members of the local community and the local tribal population is benefited in the employment and income generated. New and additional programmes different from the traditional forest department operations bring in fresh funds to the community which provide a positive contribution to income and employment generation. Further, VSS programs are sensitive to off season difficulties when outside employment or income generation opportunities are limited in the community.

Not all activities are direct local employment creation ventures some of them like building trenches against wild elephant incursions are fully mechanized and the budget is entirely spent on payment to contractors who bring in heavy machinery like JCB excavators into the forest by creating new roads and also smothering small trees and vegetation on the way. Such roads once created, remain for other vehicles to utilize as and when they choose. It is not only trenches that are built with exclusive mechanical power. There are also small ponds named 'water holes' with the intention of providing drinking water to the wild life in the area. The forest department budgets provides such a head so that enterprising contractors and forest officials tends to utilize the opportunity to dig 'waterholes' using excavator with out the carrying out a detailed assessment of the movement pattern of wild life, the availability of natural sources of fresh water and its seasonality before identifying the ideal locations to built such 'waterholes'. Often accessibility or other considerations determine the location and number of waterholes built.

In Vaniampuzha a waterhole has been created just beside a stream, which is close to a short trench dug on one side of the Kumbalappara settlement. Their may or may not be sound reasons for locating the waterhole on the edge of a running stream near by. It is not known whether this was budgeted as a VSS activity or a regular forest department activity. It could even be that it was convenient for the

contractor engaged in digging the trench to dig a small water hole also in the locality.

Although the direct and immediate impact of PFM activity to the tribal community is the employment and income provided, the more long term impact is related to the strategy of PFM and the selection of a portfolio of activity to actualize the strategy. The goals of PFM can be broadly listed as (1) forest conservation, (2) create local employment and income for the forest dependent community, (3) human development or tribal development within the forest and creation of sustainable livelihoods and (4) democratization of forest activities which followed a colonial and feudal pattern. Among them, the first objective of forest conservation is a traditional function of all forest development activities and there is nothing unique or specific to the PFM programme. Therefore the other goals are the more relevant ones to be considered in the examination of the strategy of PFM adopted. These three objectives are related to one other in that all of them focus on short term and long term benefit to the local community in terms of employment and income generation, they also contribute to improve the transparency in forest department activities and establish democratic procedures in the implementation of programs, while the most important aspect is the initiation of democratization of the forest department functions.

The Forest Department which acted as the local police force to control illegal tree felling and encroachments, functions on the basis of forest working plans written by senior forest officers and approved by the government to fetch non tax revenues for the government and raise monoculture plantations to feed specific favoured interest groups such as shipping and railways, in the colonial period, and the pulp and paper industry in the post independence period. All along, the interests or opinion of the local forest dwellers or tribals were never consulted while the plywood industry received substantial benefits and subsidies during the Second World War, and long after, in extracting timber of their choice from the forest. While the NWFP contractors had a free hand in extracting whatever they liked except a very few items such as ivory, sandal wood etc. which were government monopolies. The tribals and forest dwellers had absolutely no say in the preparation of strategies, programmes or development plans of the forest department.

It is with the advent of PFM programme that a slight concession was made to include the forest dwellers in the consultation process of creating 'Micro Plans'

for implementation of PFM programme in a locality. An elected President and eight other Executive Committee members had powers of oversight or at least access to the minutes and other records of the VSS activities. This is definitely a way of empowering the local community by bringing at least eight members of the local community to more interaction among themselves, awareness of forest department programs, awareness of accounting and official procedures of the forest department and the potential of the emerging of local leaders in a community neglected by political parties, government officials and mainstream non-tribal population outside the forest. PFM therefore is a capacity building programme for the tribals and forest depending community. How effective is the activities of VSS towards capacity building of the tribal population will depend on the success of VSS initiatives and the scope and magnitude of PFM programme in the overall budget and activities of the forest department.

If PFM remain as an insignificant add-on activity, with limited funds and with only minor involvement of the senior-most officers of the Forest Department, then the entire PFM will be a marginal or peripheral activity which will contribute only negligibly towards democratization of the Forest Department, which cannot contribute effectively to capacity building of the local community, or even contribute to the emergence of local leadership among the tribal communities.

It will be interesting to look at the impact of an earlier experiment in the Forest Department initiated around 30 years ago to replace contractors with convenors engaged in forestry activities carried out by the Forest Range Officers. While the contractors had to prove their financial capacity and their track record of contract activities with government departments, the new conveners could be anyone the Range Officers choose. It was on the behalf of the convener that all the forestry works was carried out and payment cheques were addressed to the convener in many instances the convener was just a messenger responsible for cashing cheques and alibi for a contractor or a proxy of the Range Officers who carried out regular forestry activities with the help of the field staff. Within that system there was no transparency and details of the work, quantity and the length of say, the fire line taken etc, were a closely guarded secret unknown to the local community. When some of these works are carried out by the VSS, although the entire paper work is managed by the Beat Forest Officer, acting as the Secretary, the members of the executive committee and particularly the President are privy to the essential details. This is the first step in creating transparency and involving

at least some members of the community in sharing the details of the sanctioned work of Forest Department and the quantum of funds spent for each work.

Very few of the traditional forestry work of the forest department have been handed over to VSS. Some of the programs earmarked for PFM under the World Bank project were handed over to the VSS. Some central sector projects insisted on transferring money only to a Forest Development Agency (FDA). They were rehabilitation planting in the natural forest under the National Afforestation Programme (NAP). The money under such scheme could be availed or utilized only by the VSS. The NAP provided funds for a few years to the FDA which could be spent only by the VSS. Funding from the source is no more available to VSS. Planting of seedlings of local tree species and cane plantation were created under the NAP scheme for a few years within the natural forest near the Vaniampuzha settlement. Annual weeding was also conducted for a couple of years in the locality.

5. SUSTAINABILITY OF NWFP RESOURCES

Minor forest produce such as honey and medicinal plant parts, now called Non Wood Forest Produce (NWFP), were traditionally auctioned out to contractors who were granted the monopoly rights of collection within a Forest Range. The fact that they were government contractors, informally give them the authority to utilize the tribal population living in the forest as bonded labourers to meet their targets of NWFP collection. The forest officials also aligned with the contractors and usually did not restrict exploitation of the tribal population by the contractors. In 1973 the system was replaced with the formation of the SC/ST Federation which was given the monopoly rights to collect NWFP free of royalty charges from the entire forest of Kerala. They established regional 'Society' offices and set up collection centres in convenient locations in tribal areas and engaged either the former contractors or their employees or petty NWFP traders as the agents to do the collection from the original tribal gatherers. The new arrangement had the benefit that the collection price was formally declared. However, depending on literacy level and social organization of the tribals, the new agents could still cheat the tribals in weights or attributing a lower quality to the produce brought in by the tribals. When the VSS were formed, the role of the private agents of the society were taken over by the Forest Department in the capacity of Secretary of the VSS on the behalf of the VSS in which all the tribals in the area are members. The monopoly enjoyed by the SC/ST Federation during the last four decades is no more valid as the Forest Rights Act empowered the forest Gramasabha, which can be interpreted as VSS to make their own arrangement for marketing the forest produce they collect. As the VSS is originally linked to be Forest Department, with all its important functionaries being regular officers of the Forest Department, the control of the VSS and its policies by the Forest Department is almost total. This has its benefit as well as deficiencies. If the Forest Department and all officials in the hierarchy are sensitive and sympathetic towards tribal welfare, then it is possible for the tribals to get a good income from their NWFP collection activity. However, it is the traders and large users of the produce who determine the prices. Sustainability of the collection process is also problematic. An intensified collection can deplete the resource base to cause a local extinction of a particular

species and to end the possibility of any further collection from the area. The deficiency is that, if even one officer in the hierarchy is non co-operative or corrupt, then the whole process will fail to work. The money flow will be chocked, wages will be in arrears and the credibility of the VSS official will suffer and the ability to prevent inroads by private traders into the tribal area will be ineffective.

5.1 Dependence on NWFP for income and employment

The NWFP season is from January to May during the summer season before the South-West monsoon. Among the NWFP items collected by the tribals of Vaniampuzha, honey is the most important item. The people in all the hamlets are well versed or experts in honey collection traditionally. A more modern or hygienic system of collection and processing is being promoted by the Keystone Foundation based at Kottagiri in Nilgiris district in Tamil Nadu. While the traditional methods involve the squeezing of the honey comb, the new method is more hygienic and the product is unsqueezed honey which commands a higher price in the market. However, as the Kalkulam society does not distinguish between squeezed and unsqueezed honey, the collection charge available to the collector is the same irrespective of the quality. The Forest Department has conducted training for honey collectors during 2005, 2007 and 2012. During 2010 a group of nine collectors including ladies were taken to Kottagiri for training and to show them the facilities and practices adopted by them. The Keystone Foundation also provided training to start a pickle making and bottling unit.

The Nilambur South Forest Division has already established a honey processing unit at Nedumkayam which processes the honey collected from the New Amarambalam forest inhabited by the Cholanaikkan tribal community. The Key Stone Foundation personnel have been managing the honey processing bottling unit of at Nedumkayam. Other such units are proposed by the Forest Department. Till such a time, when a premium is obtained for unsqueezed honey, there is no incentive for the collectors to adopt the more modern and hygienic way of honey collection and processing.

The other NWFP items collected by the VSS during 2009 and 10 were *cheenikka*, *kollakka*, *jathipathri*, *kurunji* (both dry and green), *orila* (both dry and green), pepper vine and tender mango. In the Kumbalappara hamlet every household is involved in honey collection during the season. Other than honey, they do not collect the other NWFP items for the VSS. The Kumbalappara settlement is the farthest from the road and the VSS collection centre. In the Tharipapotti hamlet

consisting of 13 households, 10 households go for honey collection during the season and five households are involved in the collection of *kollakka* or *cheenikka*. In the Vaniampuzha hamlet, only nine households out of 27 are reported to go for honey collection. And seven households collect *kollakka* or *cheenikka* during the season. In the Irrutukuthy hamlet which is closest to the road and where the NWFP collection centre of the VSS is located, only six households are reported to engage in honey collection among 23 households in the hamlet.

5.2 Sustainable Management of NWFP Resources

One of the important aims of PFM in Kerala is the sustainable management of NWFP resources. The consumers of NWFP, unlike in the past are large corporate entities who are well organized and have substantial political clout. They are the manufacturers, traders, exporters and hospital owners in the Ayurveda Medical Industry. Their main raw-material is wild plant parts collected from the forests. There existed a traditional way of collecting medicinal plants from the forest, that are not available in the settled areas, such as homesteads and agricultural lands. The demand came from traditional healers or physicians who did much of the collection themselves. Later as the industry grew and bottled medicines were prepared on a commercial scale by Ayurvedic pharmaceutical firms catering to the local market. Their marketing success led to their expansion to a much larger area and now they have a global presence. While the early physicians were not driven by the profit motive, the new ventures are extremely market savvy and highly competitive. Minimizing costs and maximizing profits, is the formula for success. Therefore, obtaining raw material at the cheapest of prices from anywhere, even illegally is a management priority. No wonder, the forests have been virtually stripped of the valuable NWFP resources during last few decades, directly in proportion to the growth of this industry.

The Forest Department has rightly attempted to protect the forest against such wanton depredation by new fortune seeking manufacturers and the traditional impoverished tribal collectors. Although the function of VSS is oriented towards collecting of NWFP from the forest, it is also an attempt at regulating the collection, first by excluding outsiders from entering the forest and collecting NWFP and then by setting apart a small area of good forest as Gene Pool Conservation Area (GPCA). The idea is similar to that of maintaining a traditional sacred grove in agricultural area as a nature refuge for plants, birds, the smaller mammals and other living organisms in the locality. Religious and cultural

conventions supported the survival of such sacred groves in the rural areas of the Kerala. The GPCA in the forest identified in the Micro Plan is supposed to serve that function. Forest officials expect members of the VSS to respect the GPCA identified by conscientious among them and boundaries of which are described in the Management Plans prepared by the VSS and approved by the Conservator of Forest.

Table 11 shows the NWFP items collected by the VSS from the forest. Honey is the most important item in value terms. During 2005, 878 kg of honey was collected and in 2007 the quantity collected was 2486 kg. In the subsequent years it declined to 790 kg in 2009 and 415 kg in 2010.

The collection of NWFP reveals that Kumbalapara, Tharippapotti and Vaniampuzha are more dependent on the forest and NWFP collection compared to the Irrutukuthy settlement which has greater access to the outside world. Two factors may have contributed to the decline in the dependence of NWFP for a livelihood. One may be the opportunities for employment outside the forest and the other may be the decline in the resource base of NWFP in the forest which may require longer time or greater effort in foraging. The impact of education and exposure to the outside world may also have contributed to the less dependence on the forest by the people of Irrutukuthy and more outward orientation. If this inference is true, eventually the proportion of people depending on NWFP for a livelihood in the other settlements also is bound to decline with increasing accessibility, greater participation in education and the decline in the total, as well as the per capita, availability of NWFP resources in the forest which are just harvested from the wild.

During 2011 and 2012, the honey collected by the community was sold to private traders as the VSS did not collect the same. The other items collected by the VSS were Kurinji, pepper vine, *arila*, *cheenikka*, *kollakka*, Mango and nutmeg mace. Items such as *marotti kuru*, *dammar* and *eenth*, which were collected in 2005 were not collected subsequently. The pattern of collection through the years as shown in Table 11 indicates that collections have been opportunistic and inconsistent over the years. Sustainability of such collection regarding the items collected or the annual quantity collected is open to doubt.

Table 12 shows the collection of honey during 2007 to 2010 in the different hamlets and the number of persons engaged in the activity. The actual number of persons may be more, since family members of the collector accompanying him

may not be shown. During 2007 and 2009, all the hamlets were engaged in honey collection. During 2010 and 2011, the VSS collected honey only from the Kumbalapara hamlet. In 2007 both Vaniyampuzha and Tharippapotti hamlet collected similar quantities. The average collection was 65 kg in Tharippapotti which was the highest and 23 kg in Iruttukuthy which is the lowest. The highest individual collection was 243 kg in 2007. During 2009 the total quantity collected declined to 30 percent of that in 2007 and the highest individual collection came down to 141 kg. In the case of honey also sustainability of the activity at the previous or current levels seem impossible.

Table 13 and 14 show the collection and selling price of different items during 2009 to 2011. Even when the collection price of honey is Rs 140 in 2010 the total income of the highest collector is just over Rs 18,000. The average income from honey collection per collector during 2009 when the price was Rs. 75/kg, ranged from Rs. 675 in Iruttukuthy to highest Rs. 2,638 in Kumbalapara. It may be noted that these are the annual income from honey collection for the families engaged in the activity. The collection and selling price of the VSS are close to each other leaving a small margin for handling and transportation. The selling price of Rs. 240 shown for 2010 is not the receipt of the Vaniyampuzha VSS. It is actually the income of the Eco shop of the Forest Department managed by the Nilambur FDA.

During 2011 and 2012, honey was not collected by the VSS. However members continue to collect honey and sell it to outside traders. A decline in the availability of wild honey is observed. The other items collected are *cheenika* and *kollaka* which has not been collected since 2009. During 2010-12 *kurinji*, pepper vine and *orila* were collected. The NWFP items, mostly medicinal plants were sold to private traders supplying the medicine manufacture industry at competitive local rates. Mango was collected only during 2009 and 2012. Bee wax is also obtained during honey collection and it also fetches some income for the collectors. The price of honey paid as collection charge by the VSS was Rs. 75/Kg in 2009 and Rs.140/kg in 2010 at Vaniampuzha. The pattern and quantity of MFP collection reveal that the potential of MFP as source of livelihood is limited and it is unlikely to be sustainable when the intensity of extraction increase and when a larger number of people are engaged in the activity.

Table 11. NWFP collected by Vaniyampuzha Tribal VSS (Quantity in kg.)

Years	Cheenikka	Kollaka	Mango	Tender Mango	Honey	Mace	Bee Wax	Pepper		Kurinji		Orila	
								Vine	Dry	Fresh	Dry	Fresh	Dry
2005*	74	0	0	0	878	35	20	0	0	0	0	0	0
2007	781	189	0	0	2486	12	7	0	0	0	0	0	0
2009	2897	1022	2711	576	790	27	12	0	0	0	0	0	0
2010	0	0	0	0	415	0	0	851	7995	3619	85	2	2
2011	0	0	0	0	0	0	0	2370	20185	0	3716	0	0
2012	0	0	1125	0	0	0	0	309	3548	0	0	0	0

*Additionally collected items during 2005, Dammar- 114 Kg; Marottikuru – 296 Kg; Eenth - 11Kg

Table 12. Collection of Honey by Vaniyampuzha TVSS during 2007-2010

Hamlet / Year	Number of persons			Highest individual collection (kg)			Lowest individual collection (kg)			Total Quantity (kg)		
	'07	'09	'10	'07	'09	'10	'07	'09	'10	'07	'09	'10
Iruttukuthy	3	6	-	43	19	-	4	1	-	70	54	-
Vaniyampuzha	18	13	-	243	31	-	7	1	-	848	212	-
Tharippapotti	13	4	-	162	53	-	6	10	-	845	109	-
Kumbalapara	12	11	10	153	141	116	17	3	6	723	387	415
Total/max-min	46	34	10	243	141	116	4	1	6	2486	762	415

During 2009, 28 kg of honey is additionally collected from neighbouring Thandankallu colony

Table 13. Collection and Selling Price of NWFP items at Vaniyampuzha TVSS in 2009 (Rs. per kg.)

Item	2009	
	Collection price	Selling price
Honey	75	82
Bee wax	100	110
Mace	145	151
Tender mango	18	20
Cheennikka	10	-
Kollakka	8	9

Table 14. Collection and Selling Price of NWFP at Vaniyampuzha TVSS during 2010 & '11 (Rs. per kg.)

Item	2010		2011	
	Collection price	Selling price	Collection price	Selling price
Honey	140	240*		
Kurinji (dry)	3.5 - 9	4 - 9.5	11	11.5
Orila (dry)	13	13.5	22	22.5
Orila (fresh)	5	5.5	-	-
Pepper vine			16	16.5

*The selling price is at the Eco shop of the Forest Department but the VSS receive only a much lower price

5.3 Degradation of forest

Forest fire, which used to be the major cause of forest destruction, has been avoided in the area during the last decades. All forest fires are man made while some are accidental, spreading from a carelessly thrown cigarette or a cooking place abandoned carelessly, but most are deliberately made to clear ground vegetation or leaf litter, to facilitate hunting or in malice against some individual of the Forest Department responsible for the area or again to justify the need for engaging fire watchers in an area. The absence of fire in the forest is an indication of the good relationship between the local people and the local forest officers.

The other form of forest degradation is by excessive extraction of forest produce from an area beyond a threshold limit which prevents sustainable regeneration of the resource. Intensive and continuous exploitation naturally damages the ecosystem and changes the composition of the components. NWFP collections for the market, inevitably impacts the resources base, and when the prices are high

the extractions is intensified. It also depends on the number of people engaged in the activity and also the distance from the settlement to the location of the resource. A fortunate thing about the Vaniampuzha area is that the NWFP collection area have been traditionally identified as belonging to different hamlets and there is no instance of people from one area intruding into another's territory for extraction. Such inter-hamlet or intercommunity conflicts on resources exploitation have not been reported. However in the case of honey, they arises competition to claim new hives in the forest where the first finder has the rights of collection. For some unknown reason the production of honey is declining. Whether it is a cyclical decline or an indication of a permanent decline is difficult to ascertain. If more members of the tribal population find jobs outside the forest, then the pressure on forest will decline. However, the lack of education and skills for outside work are limiting factors. The current generation will have to continue the dependence on forest for their livelihood.

Forest degradation is hastened by the improvement in accessibility to forests through roads that bring vehicles, weeds and often forest fires into an area. Roads, once established, becomes a permanent feature and acts as the base for the expansion of road network and of other developmental activities such as extraction of timber, raising of plantations starting of tourism ventures, building of watch towers, office buildings, staff quarters and related infrastructure. Roads bisect the forest and affect the continuity of canopy restricting the movement of arboreal fauna and when vehicular traffic increases, it affects the movement and survival of wildlife in the area. The clearing of fire lines and boundaries, effectively creates a clear track across the forest, which in course of time become a jeep track and eventually a regular road.

5.4 Sustainability of NWFP production from the forests

There can be no two opinions that the forest is finite in area and the resources are finite. In theory a sustainable harvest or production is possible if the seasonal or annual harvest is carried out in such a manner, after the items are fully matured and the quantity collected is less than the total, leaving sufficient seeds or other regenerating materials in the locality to produce a similar output in the succeeding years also. The techniques of harvest must also abide by very careful conservation oriented methods such as avoidance of lopping branches to collect fruits, planting back shoots of tubers after digging them out at the appropriate season and collecting honey from each hive leaving behind sufficient portion of

the hive to enable it to be rebuilt by the bees for continuous production etc. Although the aim of the VSS is to conserve the forest and NWFP resources in the area and to foster enlightened conservation practices in harvesting, in practice it depends on the individual collector whether such restraints are practiced. The incentive always is to collect the maximum quantity, in the least amount of time with least effort. Even though the NWFP resources are available free to the collectors, the price they receive for their knowledge and effort is too meagre. Since historically it is the NWFP traders, manufacturers of medicines and other items and their distribution network that create the value addition and corner the entire profits; the collectors get a raw deal.

It is certain that while an active VSS can contribute to sensitizing the NWFP collection and can encourage scientific harvesting methods, it can only delay the eventual exhaustion of the NWFP items harvested commercially from the forest and even local extinction of many items that have a growing market. In the long run, production for the market and conservation can't coexist in the dwindling and degrading forest. When the prices or demand increase, which is a natural phenomenon, production, will be intensified and conservation values will inevitably be sacrificed.

Sustainability must be considered in a long term perspective and no successful examples are available of a sustainable production from the wild from the same area continuously. When production levels are maintained for a period of time it may appear that the production is sustainable. It may be that the time frame and data availability may be insufficient to make a reasonable assessment. It may also be case that the area of harvest is expanding or moving on to previously unharvested areas which eventually reach a limit sooner or later, then the entire production system will come to a halt.

The establishment of GPCA has a parallel in the history of forest management in India for timber production. A Working Plan Officer (WPO), who was entrusted with the preparation of the Management Plan for a Forest Division for the next 10 to 15 years, divided the area in to three Circles. They were the Plantation Circle, the Selection Circle and the Protection Circle. The Plantation Circle consisted of the existing plantations and new areas earmarked for clear felling during the period of working plan. The Selection Circle consisted of natural forest proposed for timber extraction within the natural forests. Such areas were selected taking into consideration the availability of high value marketable timber or trees

required by the railways or the plywood industry. Care was taken to include only areas which was accessible or which required only low investments for road building. The third circle, the Protection Circle comprised those areas that were truly inaccessible and those which did not contain large volumes of marketable timber. As was shown by a KFRI study (FAO 1984, Chundamannil 1992), the Protection Circle kept shifting with every revision of the Working Plans and at times, the Selection Circle was expanded to the Protection Circle. Exhausted and degraded areas, after selection felling, were reverted back to the Protection Circle. So just by looking at the area of Protection Circle over years, it may not reveal the true fact that what was protected in the beginning has already vanished and the new areas under the Protection Circle have nothing worthwhile in them to protect.

Similarly the identification of Gene Pool Area is a mandatory requirement for the preparation and approval of the management plan of VSS, ultimately it is only an intellectual exercise and the area is neither marked in the field nor policed for compliance in non-extraction of NWFP. It might be the case that the identified Gene Pool Area may be most inaccessible or devoid of marketable NWFP. As in the case of the previous Protection Circle, the boundaries of Gene Pool Area may shift with the revision of management plan or with the emerging market opportunities for specific NWFP.

The selection felling of valuable trees was a practice followed in our forest for more than a century before it was stopped. No example of sustainable production or repeated harvest from the same area of the same species of trees and the same dimensions has ever been reported from the forests of Kerala. In practice the selection felling operation moved further into the interior forest creating its own road network and accessibility which resulted in forest degradation and eventual conversion of the forest into plantations, agricultural lands, reservoirs or even townships. In rare cases where repeated harvest took place, the second cycle may have targeted a different set of species from that originally extracted, or targeted lower dimensions of trees which were left out in the earlier harvest. Compared to the revenue generated, employment created or the value of the output from the selection felling operations of the Forest Departments, the lasting damage to the forest ecosystem and the loss of forest integrity, was so much more devastating and permanent. The principle of sustainability, propagated by the early Indian foresters of the German tradition relied upon

examples from temperate forests of Europe, with just a few species of trees, where selecting felling practices were practiced. These principles were not applicable to the mixed tropical forest of Kerala which was analysed in studies by KFRI sponsored and published by FAO in 1985. The High Level Expert Committee on Forests (1986) appointed by the Government of Kerala also reiterated these findings which resulted in the stopping of selection felling in Kerala forests, ahead of the country-wide ban on 'Green Felling' in the natural forests without the express authorization of the same by the Central Ministry of Environment and Forests.

The case of NWFP harvest cannot but be different from that of selection felling of trees in the forests. Actually, the situation might be even more precarious since many of the items collected have a seasonal life cycle and it is difficult to monitor the long term trends in the growing stock availability and the changes in their population. A mere optimism regarding sustainability or perpetual harvest is totally misplaced. A very regular system of monitoring or of policing in an area effectively is fairly impossible. When it is difficult to prevent activities that are absolutely banned by law within the forest, like hunting of wild animals, cultivation of *ganjah* or brewing of *arrack* etc., it is unrealistic to be optimistic about the ability of Government agencies to control, or fine tune harvesting procedures of NWFP items by individual collectors from extensive areas which are both legal and in some cases, the only available livelihood option of the tribal community. It will be more realistic to think of employment options outside forest which can provide a better income and a better lifestyle for the younger generation, not only to reduce the dependence of the tribal people on forest, but also to supplement their income in the context of declining yields of NWFP items and lower per capita availability.

6. PARTICIPATORY MONITORING AND EVALUATION

The VSS has a system of monthly meetings of the executive committee and half yearly meeting of the general body of all members and their family in which members can express their views on the ongoing programmes or related matters. A regular system of auditing of expenditure of the VSS is also conducted by the staff of the Accountant General's office. In a limited sense some kind of monitoring and social auditing is practiced in VSS activities. The efficiency or sufficiency of these is open to debate.

If sustainability of NWFP extraction and human resource development in forest areas is to be monitored, a more refined system is necessary. Currently NWFP items have a market and a seasonal price. Local collectors have the knowledge of where the items are available and the effort necessary to collect them. Except for honey, there has never been a steady demand for the items and an assured price. Manufacturers and traders secure the items from the cheapest possible source.

To conserve the NWFP resources, the VSS attempts to restrict collection by non members, prevent over exploitation and identify a Gene Pool Conservation Area (GPCA) and maintain it as an inviolate reserve, to avoid collection of endangered and threatened species. However, the demand for a particular item it's market price, the attitude of the Secretary, the need for employment among the VSS members, the efficiency of the collection store and payment mechanism etc., will determine the scope and intensity of collection. Sustainability issue may not be adequately addressed in the circumstances.

Monitoring and evaluation is conventionally done by a superior authority within the organization carrying out an activity. It may also be outsourced to an expert, outside the agency. Participatory monitoring and evaluation (PME) is an advance from the traditional approaches to monitoring and evaluation with it's emphasis on participation. PME is practiced in an action oriented community learning exercise that builds on experience and social analysis. The learning process creates conditions for change and action, which leads to capacity building for problem solving, decision making and planning.

Participatory monitoring and evaluation adds an element of democratic practice and involves the direct beneficiaries as well as important stakeholders in the activity. This approach enhances the transparency and has the potential to dynamically modify the programme by quickly correcting mistakes and overcoming bottlenecks in implementation. The essential difference is that, in the traditional monitoring and evaluation, it is initiated by the higher authorities and their perspectives are enhanced; while in participatory monitoring and evaluation a greater say is allowed for the beneficiaries and others outside the implementing agency. The long term benefit of participatory monitoring and evaluation is that shared objectives and democratic decision making can be fostered. In the context of management of public resources like forest, participatory monitoring and evaluation is the more appropriate method. It is the tribals or local residents that are affected positively or negatively by an activity inside the forest and they are the primary stakeholders. Participatory monitoring and evaluation can use local knowledge and local experience in evaluation of a programme and help obtain authentic feedback for ongoing programmes. PME, when implemented as an integral part of a programme, provides a learning experience for the community and it can help local skill development and awareness of social and environmental issues in the area. Essentially participatory monitoring and evaluation is a capacity building activity and a necessary ingredient in community development and rural development programmes.

Within the participatory forest management proper, participatory monitoring and evaluation can happen during the general body meetings, but usually it happens only during the 'Revisit' or the renewal of the Micro Plan for an area. The preparation or revision of a Micro Plan involves several community meetings.

The JFM and PFM guidelines mandate evaluation reports by 'experts' or agencies commissioned by the Forest Department. As these agencies are selected not on the basis of any transparent criteria, those who get selected for the job, stand at a greater advantage for further patronage in relation to other experts or agencies, if they provide a favourable report of appreciation. Although evaluation studies by credible academics have their own value, a genuine participatory monitoring and evaluation involving academic experts and members of local community would be a better method to the prevailing practice of implementation agency commissioned evaluation reports by experts. If such participatory monitoring and evaluation is carried out annually it will go a long way in improving the design,

content and implementation of all participatory forest management in Kerala. Perhaps, such a participatory monitoring and evaluation has to await the next phase of PFM in Kerala.

The Vaniyampuzha TVSS has not addressed community development issues in a comprehensive manner. All it attempted to do was to involve the community in raising small plantations of bamboo, cane or mixed species using funds available through the FDAs. According to the rules of National Afforestation Programme, only Joint Forest Management Committees can utilize these funds. Beyond this activity, collection of NWFP which was carried out by the SC/ST Federation through its subsidiary the Tribal Co-operative Society was sought to be replaced by the VSS. With these limited objectives monitoring and evaluation of either community development or sustainability of harvesting of NWFP resources in the forest is not feasible.

In the context of the people and the forest around Vaniyampuzha, monitoring and evaluation has to encompass community welfare aspects and sustainability of NWFP harvest in the larger context of forest conservation. An essential ingredient in monitoring and evaluation is identifying or developing appropriate criteria and indicators for this purpose. Community welfare aspects include status of health, education, employment income assets etc. These have to be monitored on an individual or family basis. Sustainability of NWFP extraction require time series data on items collected each year its quantity and quality, the specific areas of collection, the distribution of the growing stock of the particular resource before and after harvest; to assess impact of harvesting on regeneration and health of the eco system.

Monitoring and evaluation has to be accompanied by documentation of the process of estimation and also of the proceedings of the group entrusted with this task. Participatory monitoring and evaluation require a broader community-based approach in which other stake holders, over and above the actual collectors, are also involved in the estimation and quality assessment of the status and changes in the eco system. The documentation must be followed up with verification of the data and assessment by other community members or experts from outside for compliance with standard procedures and to ensure reliability. ¹

Both changes in community welfare and forest quality take time to manifest itself, therefore long term data and trends are needed to make sound evaluations. The criteria and indicators adopted in the beginning may require refinement or

modifications along with the increasing knowledge base created by the participatory assessment process. The selected indicators must be sensitive to changes and should be able to capture the dynamism of change.

In the case of sustainability of NWFP harvest, it is necessary to get information regarding the distribution of growing stock, geographic locality-wise abundance and match the harvest in terms of quantity, quality and seasonality with specific sites along with the collection dates and names of collectors. It is possible that a particular quantity is collected from different localities over time and that, after a period of time it is no more available in the entire area. A short term spurt in collection may actually indicate a depletion of the growing stock rather than local abundance.

Specific species of plants or other life forms may have a crucial link with other species in the eco system. With intensification of commercial harvesting, some species may disappear from a locality or it can change the character and composition of the eco system by the nature of the harvesting itself. Ayurvedic Medicines often require the roots of plants which necessitate uprooting the entire plant, not just for the root, but also the facility of correct identification of the plant by the purchaser.

Due to high demand and scarcity of NWFP items in the wild, substitutes are increasingly used and items are procured from a much wider area extending to far away States in the country and even from abroad. The arrival of cultivated varieties of traditional MFPs from other states with extensive agricultural land is a positive development, although there is a feeling that plants grown with the aid of chemical fertilizers and irrigation may not be as good as that grown naturally in the wild. Collection from the natural forest, in spite of the hurdles involved, is still the cheapest and the first choice of the consumers since only a nominal harvesting cost apply.

The Forest Department does not allow the collection of endangered species notified in the Red Data list of the IUCN and other government notifications. However clandestine collection takes place for various reasons including the fact that the forest staff is insufficient to guard the entire forest; there is no inventory of these items in the wild; the NWFP items do not have the priority of sandal wood or other valuable timber species for the Forest Department and lastly, some staff members can abet the collection for humanitarian reasons or self interest.

A transparent, truly participatory monitoring and evaluation system to address the sustainability issue, in not just the NWFP harvest alone, but also in the larger context of biodiversity, water and landscape conservation aspects can bring out the status of the forest and health of the forest ecosystem. Now that hundreds of VSS and Eco Development Committees have been formed in the forests, wildlife sanctuaries and national parks, these institutions can be empowered to carry out the task of participatory monitoring and evaluation of forest quality in their respective localities. Such an enterprise will naturally document the quantity of extraction of different NWFP items and also the changes in the growing stock of these resources surviving in the forest. It is in the best interest of the entire population of the State and the nation that forest quality is monitored on a regular and credible basis to document the changes in the biodiversity status and also to ensure that the headwaters of our river systems remain healthy for the sustenance of water availability downstream for all human activities. The population of Kerala depending on potable water supplied by centralized distribution systems and also those depending on bore wells have increased spectacularly in the last few decades. There is a great danger that if our forests are allowed to degrade further, fresh water scarcity may create acute distress in the entire State; not just for the forest dependent communities or tribals in the forest.

There is a compelling need to revitalize the Vana Samrakshna Samithies and the institutions of the participatory Forest Management in Kerala and to involve them in the greater mandate of forest conservation and monitoring of changes in forest quality, and not just the question of sustainability of harvesting a few items of NWFP currently in demand from one industry or the other.

All industries serve mankind in one way or other. Traditionally, forests were the frontiers from which cheap materials were extracted for ship building, railways, plywood, pulpwood, paper and other sectors. The Impact of such extraction on the forest and environment and on the forest dependent people is inadequately assessed. The forests are now tiny islands exposed to great many challenges and vulnerability. Like the last straw on the camels back, the system may collapse earlier than we expect. Therefore it is wise to initiate the process of quality monitoring of the forests, beyond just assessing the forest cover or reporting the area notified as Reserves.

It is vital that the larger society and the local people are involved in conservation assessment of the forest. The forests serve a critical function in the well being of the people and in protecting the environment and water supplies of everyone. Neither do the National Forest Policy or the common sense of the ordinary people justify the utilization of the forest to meet demands of this or that industry for specific items. The forests have to serve a larger social purpose and also to sustain the life and well being of the forest dwelling tribes. NWFP collection from the forest may be the only livelihood option of such people at this point of time. Humanitarian consideration compels continuation of such activity in the absence of viable alternatives. However creating viable alternatives and capacity building through education, training and provision of alternate employment avenues is the duty of the State so that all citizens, including the forest dwelling tribes, are able to enjoy the benefits of citizenship and partake in the fruits of development.

The knowledge and familiarity of the forest acquired by the tribal community in Vaniyampuzha and elsewhere, has allowed them to survive so far, and it has served the interests of outsiders in the exploitation of the forest for various purposes. To take the participatory forest management initiative and the institution of VSS to the next level, it is necessary to empower the members of the community to assume the role of guardians and protectors of the forest, side by side with the Forest Department. They must be considered as partners in the conservation effort and their knowledge must be utilized to monitor the conservation effectiveness in the field. Capacity building is necessary to carryout the task. For this a VSS surviving on the leftover funding from plantation raising activities in forest is not at all equipped. *Ad hoc* collection of NWFP responding to market demand for the sake of employment generation and income cannot be considered a sustainable livelihood option for the entire community, particularly for the children and the youth with an exposure to the outside world and aspirations beyond that of their forefathers.

Capacity building of a community cannot be considered meaningful if it is focused on the male population alone. Half the population, in the case of Vaniyampuzha, more than half, is comprised of females. Therefore, providing opportunities for employment in NWFP collection or other activities benefit the male population disproportionately. It may be remembered that the most critical factor that have contributed to the relatively higher level of quality of life indices in Kerala is the improvement in female education. The tribal population of Kerala is now at the

stage where the mainstream Kerala society was about a century ago. They need all the support the State can provide. However, the multiplicity of government agencies, each with its own limited mandate, capabilities and rivalries, create a situation in which the target population slip between different support systems.

The Forest Department with its own tradition of plantation raising or forest produce harvesting cannot take up issues of health or education of the community. The Tribal Welfare Department is modelled like any Rural Development Department focusing on public infrastructure, housing or agriculture development while supporting education and health in a modest way. The Education Department traditionally concentrated on the urban areas and population centres leaving community organizations or the private sector to service the frontier areas. Religious and caste organizations which filled in the gap in education access in the government network have not provided such service in the tribal areas.

The reliance on Central government funding for basic services and functions such as funding through National Afforestation Programme, or Green India Mission for the participatory forest management programme or again the DPEP or Sarva Siksha Abhiyan for primary education puts the tribal population at the greatest risk. Since the activities continue till the duration of the programme only. The Alternate School supported by the DPEP continued tenuously through the SSA programme, and since 2011 these schools are left out. Teachers remain without pay for long periods and *ad hoc* continuation is granted only for short periods at a time. The Vaniyampuzha MGLC School is scheduled to be closed down March 2013. The capacity and the ability of the VSS to support the school for the sake of community welfare is doubtful given the fact that the NAP funding for the VSS has ended and the new GIM projects are yet to take off. Further the VSS has had no interest nor have provided any support for education so far.

Participatory monitoring and evaluation of community welfare can be taken up by the VSS in the limited context of spending the VSS funds under the entry point activity in the NAP programme. In Vaniyampuzha, the available fund for such work was utilized for creating an electric fence and there was no money left for anything else. The fence itself has collapsed without a trace, leaving no residual benefit to the community. What the VSS could have done was in assessing the changes in the growing stock of the NWFP items collected by the VSS. Here again, as we have seen except for honey, there is no continuity in the collection. The

activity itself is dependent on fund flow to the VSS and it is just sufficient to pay the collection charges to the members. It is obvious from the figures of the quantity of different NWFP items collected that the activity is unsustainable, even in the case of wild honey. As with the Panchayat funded MGREGS, the NWFP collection by the VSS can be considered as a poverty eradication scheme to provide some employment, to those residing in the forest without other opportunities.

For the VSS to carry out participatory monitoring and evaluation of community welfare aspects and forest health, it is necessary that the VSS evolve into an active community organisation with volunteers to build social networks and document the status and changes taking place. Monitoring has to be a continuous process with quarterly meeting of volunteers in each hamlet to review the changes in a truly participatory manner. After the initial documentation of all households and the details of all its members, monitoring requires only assessing the changes over time.

The general problems and challenges facing the community should be first discussed and documented so that either improvement of the situation or worsening can be reviewed in course of time. Each family or household may have their unique problems. Some may have acute needs that may require community support or even government help. A participatory monitoring activity can help to bring such situation to the attention of the rest of the community for appropriate redress.

At the family level, nutrition and health of members may be wanting, affecting the capability of the members to obtain gainful employment and sufficient income. Literacy and education status of all the members influence the self esteem and capability to perform well. Addiction to intoxicants and indebtedness can cause serious problems to the family. Access to resources and personal skill vary with individuals and these determine the opportunities available. Monitoring and documentation of the status of health, education, employment and economic status of each family can help evaluate the development achieved by the community over time.

The health of the forest which sustained the forest-dependent community in the past and the sustainability of NWFP harvesting is an important area for the VSS to monitor. This can be done along with the documentation of the quantity supplied to the VSS and price paid to each member for the NWFP collected. A few more

details regarding the locality of collection and the regeneration status of the items in the locality as perceived by the collector may be recorded. It is necessary to verify these perceptions by a different set of people to assess the regeneration status of the items collected periodically. Monitoring of the quantity harvested can give an indirect indication of the potential or abundance of a resource. However, if the growing stock and regeneration is not concurrently monitored a crisis in sustainability will be evident only after the resource base is exhausted. Global warming, climatic changes, fragmentation and degradation of the forest accelerate changes in the ecosystem and composition of the species. Intensive harvesting can quicken the pace of changes.

Threshold limits of sustainable harvest in a locality, is not known due to the multiplicity of factors that influence it. The possibility of sustainable harvest is often a faith carried over from the European forestry theory developed on the basis of timber stand management in nineteenth century Germany. It's applicability to NWFP management in the tropics is debatable. All the same, monitoring and evaluation, with community involvement is critically important in scientific forest management and for planning future management strategies. An active and healthy VSS can be an effective bulwark against theft of valuable species or smuggling of rare and endangered species from the forest. Only when the local community is involved in the monitoring of the forest and its quality, can effective protection be assured. Participation in harvesting alone is neither useful to the wider society or to the tribal community in the long term. Unlike the field level officials who get transferred frequently from place to place, it is the tribal community who have a long term stake in the health of the forest ecosystem and sustainability of their livelihood based on forests.

7. DEVELOPMENT STRATEGY AND FOREST CONSERVATION

It is now well recognized that human development and environmental conservation are not mutually exclusive or conflicting in nature. Environmental conservation, which includes water, biodiversity, soil and forest conservation, is the foundation on which any sustainable development can take place. Gone are the days in which forests could be sacrificed for obtaining capital, resources or land for development. The shrinking and fragmentation of forest has reached a stage in which conservation is the only option, except in the case where the forest dependent community has no other alternative for livelihood. In short, only humanitarian considerations permit the continued extraction of NWFP for commercial purposes from the forest. The situation which compels a forest dwelling community to be dependent solely on forest for livelihood is, in a sense, the failure on the part of the State to provide alternate livelihood opportunities or education to broaden their skill sets.

7.1. NWFP collection

When the items collected from the forest are for food and basic needs of the forest dependent community, there is an associated culture which allows regeneration of the resource. When the extraction is for commercial purposes and for a wider or the global market, then, it becomes unsustainable in a very short while. Processing units or end users are often interested only in obtaining an item at the cheapest cost. Most of the time, they are unaware of the location of the place of collection or its effect on the local ecosystem and the environment. A development strategy that is compatible with conservation has to see the ongoing NWFP collection as a passing phase for the survival needs of an indigent community, unable to find a better and sustainable livelihood as an alternative. Social and environmental considerations do not endorse any claim by industries for obtaining their raw materials or land from the remaining forests.

7.2. Agriculture

Agriculture expansion has historically been at the cost of the forest. Due to the finiteness of the land area in our planet, such expansion cannot take place

eternally. Agriculture development involves enhancing productivity and nutritive value of crops to feed the growing numbers of people. If there is a crisis in the area needed for food crops, the land occupied by commercial crops that are not essential for human survival should be retrieved for food production. The increasing areas which are being used for bio-diesel production is one such example where crop lands are diverted and forest lands are looked upon to provide for the expansion of agriculture. The total area under food crops in Kerala and that under other crops would reveal how skewed the agriculture land use in Kerala is towards non-food crops. The rapid conversion of paddy land for urban expansion, housing and road building undermines the fresh water availability and the soil productivity potential of the land. A development strategy that sacrifices good agricultural land and wetlands is bound to have profound environmental and economic consequences.

7.3. Communication infrastructure

The settlement pattern in Kerala is widely dispersed. This reflects a situation of easy water availability where every household could have a private well. A peaceful political atmosphere also encourages dispersed settlement. In most parts of rural India, due to water scarcity and insecurity, houses are clustered together, as in a typical village, surrounded by agricultural land. The fundamental difference between the two settlement patterns is that when the houses are clustered together, only one road is necessary for connecting the village to the larger communication network. In a dispersed settlement pattern, the length of the roads, the area occupied by such infrastructure and the cost of building and maintaining it, becomes enormous. Although roads have multifarious benefits, within forests, they also contribute to forest fragmentation and degradation. Fast traffic and trains kill unsuspecting wildlife on its path. Therefore the expansion of communication infrastructure within forest requires very careful thought and debate as it can have a negative impact on forest quality and integrity.

7.4 Electricity connection

All modern conveniences of life are now dependent on electricity availability. It is considered as a fundamental right of the people in urban areas. It is unfair to deny this facility to those living in the forest. However non conventional energy sources should be utilized as far as possible to minimize cost and also to minimize the ecological damage consequent on the expansion of electricity distribution

network. Although the initial cost is higher, maintenance will be cheaper if underground cables are used for electricity distribution in forest areas.

7.5. Education entitlement

When the Right to Education Act is implemented in the right spirit, the greatest beneficiaries will be those living within the forest and scattered settlements. If policy makers realize that the greatest wealth of the nation is its human resources, then any investment for its development will be considered as good for the nation. Of course the shortest pay back on investment is in sectors like mining, harvesting timber, NWFP, etc. But such activities contribute little to human development, welfare or long term wealth of a nation. Allowing the people to remain illiterate, uneducated and unskilled is not a wise development strategy for any nation. The freedom struggle of India was not just against a colonial rule, it was against a development paradigm that ignored the aspirations of the people to a share of the wealth and prosperity of the country.

7.6. Health care

The human potential is greatly impaired when a section of the population is undernourished and unhealthy. The degradation of the forest, the changing lifestyle and the poverty of the forest dependant people has created a serious challenge to the health care strategy in the development of tribals. Addiction to intoxicants and changes in life style are serious complications.

7.7. Right priorities

The development strategy for forest dependent communities, particularly tribals, require a long term vision and an integrated approach to achieve human development milestones to catch up with the mainstream society and to provide equivalent opportunities. Building of physical infrastructure or transfer of money to community members may be necessary, but these do not add up to community development or empowerment. The first priority should be for capacity building through literacy and education. This is the right way to enhance self esteem and capability to seek out opportunities and to assert their rights. The next priority should be to improve the health status, reduction in child mortality, improvement in longevity, ensuring nutrition sufficiency and providing awareness regarding a healthy lifestyle and the need to avoid addiction to harmful substances.

For a development programme focusing on human resources, it is important to prioritise institution building. Community organization and social networking can

nurture local leadership and democratic practices. Prior to the Panchayat Raj Act and the Forest Rights Act, the development strategy followed a bureaucratic mode wherein the people were considered as beneficiaries and the priority was for meeting financial targets. The above two Acts seek to empower the community and reduce bureaucratic authority to that extent. Decades of political activity have empowered the mainstream rural population to utilize the Panchayat Raj Institutions and bureaucratic dominance has been diluted there. In tribal areas on the other hand, normal political activity has not taken place and therefore they are ill equipped to challenge bureaucratic dominance in institutions such as participatory forest management. In the absence of healthy political development and credible leadership, the tribal community fall easy prey to bureaucratic manipulation, big business seduction or militant ideology. Creating a healthy capacity building programme is crucial for fostering a healthy and peaceful political climate which is essential for human development in the periphery of forests and also to ensure forest and environmental conservation for the rest of society and humanity at large.

While exotic and ethnic tourism is promoted for the affluent class in India and abroad to visit unique ecosystems and sensitive eco zones, the tribals should not be put up as objects of curiosity, rather they should be provided with equal opportunities to visit the affluent areas and experience the facilities enjoyed by the rich and powerful in society who come visiting them. It must be remembered that the Indian independence movement obtained its momentum after several Indians experienced quality education and life in the best universities in England and America. It is necessary to provide similar opportunities for the tribal communities to help them find their own voice and to empower them to protect their rights and also the forest and environment around them.

8. DISCUSSION

8.1 Priorities for tribal development

As discussed earlier, education should have the highest priority among all other welfare and development schemes for the tribals. It should get the highest amount of funding among all the programs since it is the investment in the future. Had these priorities been accepted and adopted by the government of independent India, we would have seen the third generation educated tribals competing on an equal footing for mainstream jobs. Although quite late, we must make up for the lost time by going about providing educational facilities and opportunities on a mission mode. The second priority must be to create full functional literacy among all adults in the population and to provide adult education and training programmes suitable to secure a livelihood in the modern era. The third priority must be for conservation of the forest which is the home of the tribals by maintaining the integrity of the forest and ensuring sustainability of biodiversity of natural endemic vegetation of the forest.

In the past, the Forest Department had cleared extensive areas of forests for sale of valuable timber and to create monoculture plantations (Chundamannil 1988). Although the Forest Conservation Act 1980 has arrested the rapid conversion of forest, it still goes on in many parts of India in the name of development such as dam building and mineral exploitation ventures. Most unfortunately, for the tribals and for humanity, the last large deposits of bauxite, coal and other minerals are located under the forests which can be utilized to produce wealth only when it is dug up and transported elsewhere. Needless to say the tribals will be displaced and the forests have to be scarified. Perhaps in an earlier era, when forests were abundant, its biodiversity, environment and climate functions were unappreciated, and when the tribals could simply move on to other areas equally endowed, clearing forest and mining them for valuable resources, may be justified. However, considering the tribal welfare aspects and their fundamental human rights, such disruptive human displacement and forest destruction should be avoided. Not all marketable resources should be permitted to be extracted and sold. Such an attitude will justify trafficking in human organs and human trafficking, since they are all marketable in some way or other. Humanitarian and

ethical principles must guide such decisions and purely financial profitability calculation should not lead to human and ecological bankruptcy. The principle of equity should be proactively employed, not just to create opportunities equivalent levels of nutritional availability, healthcare, etc., it should be pursued to include affirmative action to protect the vulnerable population and to empower them to defend their rights which are guaranteed in the Constitution of India, but lack in the practical method to avail and implement them. Institutions that facilitate the empowerment of tribals and that can defend their interests must be created so that the constitutional promises are justiceable and realizable.

The next priority should be to strengthen the PFM programmes such that the tribals are made true partners in forest conservation. It must also be ensured that the PFM programme is democratic in spirit and practice. All financial outlay for tribals within the forests should conform to forest conservation and genuine tribal welfare and the past practices of building motorable roads inside the forest with Western Ghats Development Project Funds or with Tribal Sub Plan funds in the name of tribal welfare must be avoided.

Beyond improving the quality and access to education of children of school-going age in the tribal community, there is a need to consider other complementary elements for providing development opportunity for the tribal community. The Vaniampuzha Community of Paniya and Kattunaiken households have been surviving on the resources of the forest. Livelihood options continue to exist in the same line of work for the community but due to changes in resource availability, not everyone can participate nor does it provide sufficient income to lead a life of reasonable comfort in comparison with that of the rest of Kerala society. Among the four hamlets, dependence on NWFP is highest in Kumbalappara, which is deep inside the forest. And it is least in Irrutukuthy which is nearest to the road. The number of families depending on outside work is increasing and in course of time those depending on the forest for a livelihood is bound to be extremely limited. In this situation, for providing a sustainable income and employment close to their hamlet, it is necessary to consider alternate options.

The first option historically has been agriculture. Considering the location of the hamlet within the forest and where wildlife have the right of way and are protected by national laws and policies, agriculture is not an option in Vaniampuzha. Instances of crop damage have been very frequent in recent times.

Further, these communities have no prior experience in agriculture or familiarity with its tools or crop calendar. The lack of land is of critical relevance. The Forest Department would not allow them to clear the forest for agriculture. Therefore, agriculture as a livelihood option does not exist.

Traditions of handicrafts making or manufacture of other marketable products do not exist among them. Training can provide the necessary skills for some kind of handicraft items that have a potential market. However marketing of these items by the community members would be next to impossible, considering the fact that the market is flooded with products with high finish and even higher promotions. The ability of government agencies to ensure marketing of handicraft products is limited, considering the high competition in a globalised market. What appears feasible is to identify organizations with a track record and credibility of sourcing their production from households or community units. The Bharat Seva Samaj (BSS) is one such organization which supplies raw material such as banyan waste, notebook paper and takes back extracted thread or bound notebooks. They have a range of such simple manufacturing programmes for which they take care of both the supply of raw materials and marketing of products. There are also private sector units in the electrical and electronic component assembling units, where the primary assembling is done at the household level. Appropriate agencies need to be located and encouraged to include these communities for their production ventures so that a steady income can be assured through the year.

The Khadi and Village Industries Commission and its State counterpart, the Khadi Board, was created exactly for such rural-employment and self reliant income generation activities. They have a variety of schemes for training and employment which could be useful to the Vaniampuzha community. It would be beneficial if an office of the Khadi Board could be started in the Nilambur area or some other intermediary agencies such as the FDA or any other credible social service organization takes up the role as an intermediary of the Khadi Board or the Bharat Seva Samaj to extend employment opportunities to these tribal households.

Two Government Agencies, located on either end of the Vaniampuzha settlement viz; The State Seed Garden Complex of the Agriculture Department and the Rubber Plantation of the Plantation Corporation of Kerala may be motivated to include members of this community in their work force to provide a regular income. Initially some of them were employed by the Seed Garden Complex as

labourers. They were later terminated due to irregular attendance. During honey collection season, they tend to give up other employment activities to pursue honey collection, which is a group activity, and to retain their traditional claim to certain areas, trees or hives. This factor which is a part of their culture and survival strategies must be considered with compassion and sufficient leave must be granted to the members of the community by government agencies in the vicinity that can employ them during the off season of honey collection. There used to be four rubber tapers employed by the PCK. All of them have retired and much of the plantation itself has been clear felled and replanted last year. Tapping can restart only after seven years.

Both the State Seed Farm and the PCK plantation at Vaniampuzha were created to abide by the recommendations of the Vested Forest Committee. The Private Forest Vesting and Assignment Act 1971 was enacted as Land Reform Act to take over excess agricultural land in the possession of landlords without payment of compensation for redistribution among the landless. In this specific case, the vested forests under private ownership in the Malabar District of former Madras Presidency were not agricultural lands; they were natural forests. The purpose of the government was to prevent the owners or their successors from clearing the forest which would have caused an environmental disaster. The British government earlier had enacted the Madras Preservation of Trees Act in the 1940s with the same purpose. However, the take over of private forest with no compensation to owners was bound to be challenged in the court and therefore a via media had to be devised to take over the forest and not to let it be cleared immediately, which was bound to happen if it was distributed as agricultural land to the landless labourers. The method devised was to grant a portion of the private forest, taken over by the government for agriculture, for plantation raising or for the Agriculture Department as a substitute for outright allotment to landless labourers. By this method, the State government objective of taking over the private forests without paying compensation was achieved, and the stated objective of redistribution was replaced with public sector agriculture or plantations. The vested forests allotted for this was immediately clear felled either for the revenue of the government or to realize investment funds for the public sector plantation raising activity.

The tribal community which inhabited these areas and who utilize these forests for the collection of tubers for food and NWFP should have been trained and

employed in government ventures. However their lack of education and political organization has excluded them from these opportunities. The community's desire for independence and preference for a livelihood based on forest would have contributed to their exclusion from the employment opportunities. However, times have changed, the boundary of the forests have receded, development aspirations have risen and it may be time to reconsider the employment policy in the State Seed Garden Complex and the PCK plantation to see how best preference can be given to members of the tribal community in their neighbourhood for employment. This would ensure a steady income and enable them to participate in the mainstream activities and eventually enable them to be self confident and access the other services provided by the government more efficiently.

Value addition to some of the NWFP collected by the tribals is a way of enhancing the income of the community. Simple procedures of sorting, grading, drying or packaging can enhance the value of an item. The traders, who do this activity currently, gain the benefit of such value addition and it may not be easy to break their monopoly. Further large medicine manufacturing units which use NWFP as raw material also may prefer their regular contractors to do this processing to ensure a steady quality and grading. At least government agencies in this sector could be encouraged to buy the value added products from the VSS or FDA in a mutually beneficial arrangement. Filtered and purified honey in consumer packaging can secure so much more income than selling unprocessed honey in bulk. This has already initiated successfully by many FDA's including Nilambur. However there is a complaint that when the honey is supplied to the FDA by the VSS, the payment is not prompt and there have been cases when the delay prolongs for a whole year after delivery. Such cases seriously affect the cash flow to the VSS and the credibility of the Forest Department and the Forest Development Agency is undermined. And further, the enhanced price realization achieved in the eco-shops of the FDA is not seen shared equitably with the collectors of honey, raising doubts whether the original arrangement with the SC/ST Federation was a better choice. At least there was no delay in payment for material collected and supplied. Surely, there are teething problems which will be eliminated in due course and the whole activity will become streamlined.

This brings us back to the discussion of multiple agencies with their individual historical roles and their interactions with tribal society. The lack of shared vision

and coordination in their activities results in unhealthy competition for power, government funds, career improvement for the officials; and at the same time, at the field level, no agency takes responsibility to ensure the welfare of the tribal community or to eliminate the negative impacts of the competition among different agencies and their inefficiency. The net result is that neither is the tribal community satisfied with the services provided by the government or the general community convinced that the money and effort spent for tribal development and welfare has been usefully spent. A total review of the investments and interface between the various government agencies and the tribal community have to be carried out so that more transparency and efficiency is brought in the sector

8.2 The Forest Rights Act 2006 and its implementation

The first Forests Right Gramasabha under the above act was convened in 2012 in which the Panchayat Ward members, local forest and ITDP officers were invited. Under the act the Gramasabha is the ultimate authority for taking decisions regarding forest rights. Appeals or objections regarding the decision will be heard at two levels in a meeting convened at the Revenue Department's sub-divisional level and the district level. Although the Range Officer is a member of the appeal committee, he does not command much authority in those committees. The Forest Department has compiled a status report on the extent of each settlement inside the forest and also the extent of land held by each household. So far, the Forest Department could restrict cultivation or other activities to the limits set by them. The first Vana Avakasha Gramasabha has constituted a 12 member committee to draft proposals for discussion or decision in the next Gramasabha. It is open to the Gramasabha to decide to claim a much larger area for their use inside the forest for agricultural activities, livestock rearing or any other economic activity they decide to start. The Forest Department's ability to control or constrain such activities, including conservation of forest, is quite limited. The greater problem would be if outsiders link up with the tribal households, and initiate agricultural, tourism or other enterprises in the forest as a joint venture or on a proxy mode. If such decisions get the approval of Gramasabha it will not be easy for any agency, including the Forest Department to restrict them.

In this era of globalization, no nation can lead an isolated existence; likewise it is impossible for a community to lead an exclusive insulated lifestyle for a long period. One senior member of the Vaniampuzha community who had gone

youth who took interest in planting and maintenance of their new agricultural crops. The results of all their agricultural venture and investments had almost always ended up as failures, mostly because of the raids by wild boar and elephants who found such crops quite attractive. At Vaniampuzha efforts were made in 2003 to channelise water from the stream to irrigate their crops. This attempt also failed because the stream dried up exactly when the crops needed them badly resulting in total loss.

At this point of time all that can be said is that agricultural experiments conducted by some of the more educated youth has given them an understanding of the problems in agriculture, some familiarity with the implements used in agriculture, rich experience in agricultural enterprise and financial loss.

The children of the first generation learners, dropouts again, have realized that agriculture is not a paying proposition and work outside settlement is the goal to be pursued. Some of the young adolescent boys have found work in the food preparation enterprise (Noolputtu making) started by some non tribal entrepreneurs and they have gone to different cities in connection with this work. This gives them an opportunity to earn more money and consider employment options outside the tribal colonies. Therefore the impact of education, however meagre or modest, creates a radical change in the outlook of the people and broadens their outlook. How much more can be its benefits if high quality education with well paid teachers and good infrastructure is provided?

8.4 Changes in Income and quality of life of the community

For the tribals and other rural poor who seek employment as agricultural labourers now a higher wage is available. Although the wage rate for MGREGS is fairly low by Kerala standards, it provides a cushion for women and vulnerable sections of the population whose prospects for finding employment in a competitive environment is limited, to get an income sufficient to ward off hunger, particularly, when subsidised food grains are available through the public distribution system which is fairly extensive in Kerala.

Certainly the rise in general wage level, the implantation of the MGREGS, the availability of subsidised food grains have all contributed to increasing the real income of the rural poor including the tribals of Kerala. The contribution of participatory forest management programme adds to the employment opportunity and income of the tribal population. It is debatable whether the

increased cash income has translated into real assets and sustainable benefits to the tribal households. The seasonality and irregular nature of their income, results in debt bondage for the tribals who remain perennial debtors to local traders including those buying the NWFP collected by them. This debt bondage compels them to pay a high interest or higher prices for the items they buy or low prices for the NWFP items they sell.

Illiteracy and ignorance of accounting procedures make the tribals vulnerable to cheating by their lenders and the traders with whom they interact. Therefore, the higher level of cash income that has come their way has given an impression of a better standard of living than in the past but compared to the non tribal population in the rural areas or in the rest of Kerala their relative poverty has not changed since the income and quality of life of the others have improved much faster.

If Kerala has achieved a premier status among the states of India for its relatively higher physical quality of life (PQL) indices, it is primarily due to the high priority given to school education by the government and the role of social reformers such as Sree Narayana Guru and Christian missionaries who started a large network of schools.

However a century of such developments started in Travancore quickly spread to other parts of Kerala to benefit the middle class and the main stream communities including the other backward caste (OBC) and scheduled caste (SC) over the years. The tribals have always been neglected and they have always lagged behind not only the mainstream society but perhaps far below the poorest performing States in India. The multiplicity, exclusivity and differences between the 35 different scheduled tribe (ST) communities in Kerala, scattered across the forests of Kerala with differences in dialects and cultural practices, limit their ability to organize together and stake a stronger claim for their educational and social uplift. There are great disparities in the situation of the tribals across the state.

8.5 Reservations

In the case of employment opportunity an elaborate system of reservation have been established with a sequence of recruitment procedure that ensure 50 percent of the positions purely on merit and the other half is intricately divided among the disadvantaged castes. However, while some of the leading groups

such as Ezhava, Muslim, Latin catholic, etc. get exclusive and substantial reservation benefits the Scheduled Tribes (ST) are bunched together in one slot. This obscures the fact that within the STs it is just a few communities who avail or can avail the benefit of reservation due to their relative better access to education facilities. While the forward communities consider that necessary reservations have been provided, the actual fact is that from the majority of the ST communities, often not one member can avail benefit from the reservation. This can change only when there is equity among the different ST community in their access to education and each of them can be ensured equity in access to educational facilities in comparison with the mainstream society. It is not enough to provide jobs at the lowest rung in the government hierarchy. It is only when members of the community can competitively access positions on their own merit based on their educational qualifications can a change in status happen. This requires a radical change in the provision for funding of the tribal development and also a more genuine and sincere effort to create a level playing field for the original inhabitants of the lands who have been marginalized, displaced and neglected all this while, leaving the constitutional guarantees as empty promises.

8.6 Why does this happen?

The problem of marginalization of tribals and degradation of forest are related to historical factors, policy issues and attitudes of people in society. Historical factors, have to do with political matters such as proximity to the power structure in society or the class to which the community belong. The vertical hierarchy of the caste system which placed the tribals at the very bottom of the pyramid and the consequent low social status is part of the problem. The dispossession of the tribals or the non acknowledgement of the historical and customary right over forest land by the colonial rulers and the successors have made the tribals practically landless or encroachers on forest land. Although elaborate procedures for de-reserving forest or to identify settlements within the Reserve Forest where provided in the rules, most of the time the benefit of such regulations were availed by the non tribal settlers and where tribal settlements were approved, care was taken to minimize the areas of such settlement and to cover just the housing area earmarked by one or other government agency, convenient to build houses for them. Often their traditional agricultural lands where they practiced shifting cultivation with fallow lands were not considered part of the settlement,

thereby creating continuous friction between the tribal households and forest officials entrusted with protecting the forest.

In a democracy, it is the voting numbers and the organizational strength of the voters that determined the priorities of the government. Unlike in certain other States where the tribal areas are contiguous, in Kerala they are so scattered along the forest fringes making them insignificant in an assembly constituency a Panchayat or even a Panchayat Ward. This makes the tribal demands totally insignificant and irrelevant for the elected government at all levels. In this situation it is either the media or the judiciary which can sensitize the leadership or bring tribal issues to the mainstream society for consideration and action. But in the situation where most of the media is corporate owned and even the public sector media has been commercialized and is dependant on corporate sponsorship in the form of advertisements, it can hardly be expected of the media to take up the tribal cause with any enthusiasm.

The only hope then is for the judiciary which can draw the attention of the people and direct the government to conform to the Constitutional mandate and take up the responsibility of providing a dignified life, livelihood and education, comparable to that of mainstream society in the country. Unfortunately, in spite of having brilliant judges in the High Court of Kerala, regular judicial system in India, still goes by the Criminal Procedure Code and laws enacted during the colonial rule, in an era previous to the adoption of the Indian Constitution. The Indian Constitution upholds fundamental rights and directs the State to take affirmative action to ensure social justice and dignity to all citizens equally and without prejudice, with particular care towards the Schedule Tribes. Ideally the Parliament, the Law Commissions and State Legislature should have reviewed all the laws and rules prevailing in India before the adoption of the constitution and modified all the previous laws to harmonize them with the principles underlining the Constitution which is the basic law or the mother of all laws in the country. This exercise unfortunately has not taken place so far that the citizen, particularly the poor and powerless face a system of police arrogance and judicial indifference at the local level. It is open to the High Court and the Supreme Court to declare any law or set of rules to be *ultra virus* to the Constitution. They have done so several times in the past, often this happens when leading lawyers in the bar take up such issues and fight their way in the High Court or Supreme Court. The issues faced by the tribals are not paying enough or glamorous enough to draw the

attention of leading lawyers to take them up. Therefore we will have to hope that some of the leading judges will take up the fundamental problems faced by the tribals '*suo motto*'. The whole process could be speeded up if a Statutory State Tribal Commission compels the legislature and bureaucracy to act responsibly. The government of the day will also be persuaded to act on the recommendations of a formal Tribal Commission, which should have a person with the stature of a High Court judge heading it.

This issue can be discussed at four levels; at the society level, at the community level, at the family level and at the individual level. At the Society level, tribal and conservation issues are far down in priority and funding. There is poor representation in the power hierarchy, including the judiciary, of persons of tribal origin or of people with a deep empathy for such issues. The absence of an institutional support mechanism or a corrective mechanism is a major lacuna.

In a democracy the government cannot go beyond what the society desires. Ultimately it is the attitude of society that legitimizes a particular institution, determines social priorities and even specific actions by the judiciary, government departments or individuals. Therefore the social priority gets implemented by the government and those lower in priority naturally get neglected. Within the government, there are different departments who compete among each other for power and funds. If tribal development or tribal welfare is a source of funds, then every department will stake claim to it. But beyond the privilege of spending that money, there is usually no commitment or concern for whom it is intended. Within the government there is a lack of consensus on goals, strategies and actions. Each Department or agency determines their own goals, strategies and actions from time to time and it will vary with the outlook of the particular individual in charge. It is usual to see different Departments working at cross purposes or try to undo the progress made by another Department by an opposite activity. In matters of tribal welfare, bureaucratic insensitivity is the norm among officials, and selfishness or systematic corruption is not hard to find. The tribal population is considered as recipients of government charity and are expected to gratefully accept what is given gracefully and not ask for more or better. The adage that 'Government knows best' is implemented in practice by the officials who deal with the tribal population. They often behave as if they 'know best what is good for the tribal community'.

At the community level due to extreme backwardness in education, there is a total lack of awareness of the constitutional guarantee which the tribal community is entitled to. Even if a few educated and enlightened members become aware of their rights, their lack of political clout make them totally incapable to change the situation or to get political support from other mainstream parties for whom the small number of tribal voters have no significance. The only option, open before the tribal population, is to seek judicial redress. However, lack of financial resources and the very long delay in the judicial processes make it beyond the capability or patience for the members of tribal community to pursue.

At the family level there is quite a sense of helplessness due to poverty and social marginalization. Chronic indebtedness makes them vulnerable to threats, and alcoholism is a reality in most households where even children and infants get exposed to its fatal charm. The combination of illiteracy and lack of marketable assets or skills, undermine the self confidence of individuals and they act as a great de-motivating factor for any improvement in that situation. So, it can be seen that at every level-from society, government, community, family and individual level, there is a pervading indifference, helplessness and even hopelessness in the condition of the tribal population living on the margins of extremely wealthy and highly modernized community of non-tribals, who have plentiful collection of gold ornaments, silk sarees, luxurious houses, expensive cars, quality education, rewarding employment and foreign travel opportunity.

How long can such disparities continue to exist in an open democratic society, is a difficult question to answer. Strong feeling of deprivation and exclusion can result in a hostility that would be difficult to contain. In many of the tribal dominated regions in other parts of India, the emergence of an alternate politics with its militant ideology is spreading fast. Unimaginative and immature responses to the situation, which try to control the effects and ignore the causes, result in a more deeper polarization between the local community and the paramilitary forces from outside the region, who are used to blatantly undemocratic laws, such as the Armed Forces Special Power Act (AFPSA) which provide immunity to the members of the paramilitary force for whatever they do. The Fundamental Rights of the citizen are suppressed to that extent. When justice and rule of law are openly discriminatory and unfair, the prospects for a healthy and peaceful democratic State become grim.

schools faraway from the settlements may not be appropriate or acceptable to parents of students in the primary classes.

The romantic concept of a happy, independent and self-reliant tribal community in the forest is often a myth. An idyllic life where all necessities are freely obtainable from the forest, and that the government provides free housing and other essential provisions is the impression that many people in the mainstream society hold. There is certainly a change in the lifestyle, in the access to government services, employment schemes and education for the tribal community. However, their relative status in comparison with the development of the mainstream society and the opportunities they enjoy has not kept pace. In fact their relative position may have declined.

There is a growing opinion that instead of exclusive tribal colonies, opportunities should be provided to individuals and households to come out of the forest and live along with main stream rural population. Of course the government must provide land and support house construction. Such a move, if it is voluntary can enhance the educational and employment opportunity of the members. At Vaniampuzha where exists vast areas in the custody of the State Seed Garden Complex under the Agricultural Department. Volunteers could be encouraged to settle there as an experiment with an option to return to the forest within a reasonable time frame of say, five or ten years. Their traditional forest rights to collect honey and other minor forest produce can continue with out change.

8.7 What needs to be done?

There are three things that need to be done. The first is identifying the factors and forces that undermine tribal welfare and forest conservation. The second is to get the priorities right and the third is to create institutions that focus on tribal education and empowerment.

The fact that over 60 years of democratic rule and the adoption of the Constitution of India, which is very sympathetic to the tribal cause, although some change such as house construction has occurred, the disparity between the quality of life, education and employment opportunity of the tribals and the mainstream society has only increased. The relative poverty of the tribal has become more acute during this period in spite of regular allotments of government funds through different agencies for tribal uplift. It can be argued that the funding has been meagre compared to the challenges in the sector;

nevertheless it must be admitted that much of the funding gets leaked out from the system and fail to reach the target.

Education has been an area which would have created the greatest impact and if timely investments were made we would have had a third generation of educated tribals who would have stood on their feet to challenge anyone from the main stream society on their on merits. However illiteracy is rampant among the tribals even in Kerala which claim total literacy.

There is no use in pointing fingers at one or other agencies for letting down the tribals in the development process or in systematically denying the promises made in the Constitution for tribal uplift. What is important is to acknowledge the fact of their extreme marginalization and understanding the basic causes of their decline in social, economic and political independence. The most relevant thing to do is to provide high quality education in a mission mode that can reach all the tribal hamlets within the state in the shortest of time. The financial outlay necessary for such a venture would still be less than that required for setting up one IIT for which Kerala has been clamouring for two decades. During the last couple of years, Kerala has established three full fledged Universities in health, veterinary and fisheries. Certainly these are required to consolidate and carry forward our development experience in these areas; however, it is important to remember the deficiency in primary education for the tribal population whose development should be the fundamental aim of the whole development planning exercise.

It must be admitted that although changes have occurred during the last several decades in the education scenario of the tribal population, the relative position of the tribals in comparison with the mainstream population or even with those belonging to the Scheduled Castes is abysmally low. It brings no credit to Kerala which is proud of its human development index and whose performance is celebrated globally for its achievements in literacy and political innovativeness, to neglect basic infrastructure in education for its small tribal population.

The current mode of providing education facilities to the tribal population is totally inadequate and ineffective to bring up the section of the population in parity with the levels achieved by the mainstream non-tribal population. What is required is a new thinking in planning and delivery of the educational package. It is a tragic state of affairs that the women in the tribal community have to cut and sell firewood from the forest to earn a livelihood in this 21st century India with its

superpower ambitions. It is degrading to individuals of the tribal community and the Kerala society in general and also causes degradation of the forest particularly in the areas adjoining tribal habitations.

The salary of the teacher in the single-teacher schools in the tribal areas is ridiculously low and it is a small fraction that of a last grade employee in the government service that do not require even high school education. Infrastructural facility such as potable water and toilets are mostly non-existent. Even in regular schools adjoining tribal areas in the government sectors where the pay is much better, absenteeism among the teachers or unfilled vacancies undermine the quality of education received by the students. The basic poverty of the students, their lack of sufficient sets of clothes and their use of a dialect different from that of the mainstream society, make them a butt of ridicule among their peers and even by the teachers themselves. Often coming from homes with illiterate parents, and lack of lighting and inability to afford private tuitions naturally makes them remain at the back of the class in academic performance.

It is necessary to devise ways to ensure that the children of tribal population do not face discrimination in the educational system of Kerala. Dropouts from schools who firmly refuse to go back to school have painful memories of discrimination by even non-academic staff like helpers and cooks in the hostels for tribals. The prejudice against them from the non-tribal students and some teachers create insecurity and lack of self-esteem and self-confidence to pursue that education.

A way to overcome the persistent discrimination towards tribals and tribal children is to empower the statutory Tribal Commission to investigate and direct government agencies to take affirmative actions to raise the level of awareness among both tribals and non-tribals regarding the Constitutional mandates to raise the educational and living standards and to protect the dignity and rights of the entire tribal community. Concurrently special tribunals that can work on a fast track mode with judicial powers to punish atrocities against the tribal population must also be constituted. So that clear message that crimes against the tribal population, including corruption in managing funds earmarked for the tribals and indifference towards the complaints and appeals by the tribals will not be condoned. The State Tribal Commission must annually prepare a report on the status of each of the different tribal communities in the State, along with the

challenges they face and recommendations for their mitigation and general development to be placed before the Kerala Legislature so that appropriate measures can be discussed, and where needed, new laws or rules or institutions or budget allocation can be quickly made. This can also sensitise the mainstream society and invite the media also to discuss the status and problems faced by the tribal community of Kerala.

There exists a National Tribal Commission in India. Their regional office which has charge over Kerala is located in Madhya Pradesh. Naturally the problems faced by the small population of 35 different tribal communities in Kerala cannot be addressed or solved by the National Commission. Further, the problems faced by the tribal community in Central India is much more acute as they are sandwiched between the multinational mining lobby on one side and armed militants in the other. Their illiteracy and lack of education are relatively minor problems when compared to displacement by the mining lobby and harassment by the police and paramilitary forces engaged to hunt for the militants. Their very existence is threatened, to say nothing of protecting their dignity. Tribals in Central India had access to large areas of land for cultivation or for use for grazing cattle's or for the collection of NWFP resources, particularly since the density of population were very low. Many of their traditional settlements have now been relocated by the police and *Solwa Judum* militia, conniving with the mining mafia to clear the way for extensive mining operations. Therefore, expecting any positive intervention or affirmative action by the National Tribal Commission in the case of Kerala is far fetched. Kerala needs its own empowered State Tribal Commission to safeguard the rights of the tribals and ensure social justice to them.

8.8 What can be done?

Getting the priorities right in tribal welfare and VSS activities is the most important thing. Development involves creation of physical infrastructure such as buildings, roads water supply etc. But it is not exclusively that. Development involves human development, which include food security, health care, education, employment opportunity, and social security and the whole gamut of human rights. It is easy to meet the financial targets or physical targets in infrastructure development. But for true human development, appropriate institutions have to be created. Being a disadvantaged community in the matter of political, economic and educational status or assets; regular government institutions or conventions may have to be modified to serve these people

effectively. Even school text books at the beginner's level may have to adapt to the local dialect and local environment. The official working time of 10 AM to 5 PM may not be appropriate to reach government services to the community whose daily routine might be differently scheduled. An understanding that education is the key to empowerment and development involves creating institutions to reach education in the best possible manner and, as close to the tribal hamlets, as possible.

8.9 The role of VSS in forest livelihood and forest conservation

The formation of VSS in the forest area among tribals and others depending on the forest is a crucial and necessary step for forest conservation. With enlightened leadership and proper guidance by the Forest Department, these VSS can contribute to creating awareness regarding the value of the forest and the functions they perform. They can also help and protect the forest against encroachments and other destructive influences by outside agencies. Necessarily this requires community organization, capacity building and community empowerment appropriate to the location. Investments towards these can have a positive long term benefit so that the VSS is able to stand on its feet and lead the community development efforts.

The VSS as an employment generation and income distributing enterprise is not sustainable by itself in the long run. The ability to provide sufficient employment within the forest continuously is extremely limited since forest conservation principles require that the good and healthy forests are best left alone. Employment in the forest can happen only in the degraded forest and that too in the effort to regenerate or replenish them with the endemic species of the locality. Successful rehabilitation of the forest will result in very little employment opportunity of protecting the forest, such as monitoring for observing changes in the forest health and very low level of extraction of NWFP in such a manner as not to impair the quality of the forest and its productivity.

It is important for the VSS and PFM programme to have a long term vision to transform a forest dependent poor community into a better educated and healthy community that provide enough options outside the forest to those members who wish to find employment and opportunities outside. This would require considering VSS activities as primarily a capacity building programme that includes the entire population which allows each individual to upgrade skill levels,

literacy, education and the capacity to demand and access public services of the government.

It is the matter of pity that very few households had a Ration Card among the Vaniampuzha tribal community till recently. And even among the few, only two reportedly had a BPL stamp on it which provides concessional supply of food grains. This is mentioned to indicate the fact that most of the government services taken for granted by the mainstream communities, are yet to reach the tribal households even after long decades of planned development.

The government agencies that interact with the tribal communities like the Tribal Welfare Department, Forest Department, the Health Department, the Education Department, and the Panchayat do not have a suitable programme or the capabilities necessary to lead a community development programme. It is easier for government agencies to create physical infrastructure such as roads, schools etc. Even proper maintenance of these assets once created becomes problematic. The tribal communities in their present stage of development require more than creation of physical infrastructure. They require sustained hand-holding attention to provide human development and capacity building. For regular government programmes, meeting the financial target and the requirements of financial audit suffice. These necessary procedures are not sufficient to provide continuity and quality to government services. It is best suited to select a contractor based on the lowest bid and to make payments for the work done with the contractors own money, equipment and labour. A different set of target, manpower, procedures and the evaluation system are necessary in providing educational and capacity building services to a community, too feeble and powerless to insist on obtaining the entire spectrum of services envisaged in the programme.

Lack of monitoring and documenting the condition of the people such as child mortality, birth rate, morbidity condition and living standards such as access to potable water, sanitation facilities, electricity, schooling etc. is quite a serious deficiency. The longevity of different ethnic groups of tribals and the changes in their population over years have also to be fully examined. While Kerala can be proud of very low levels of child mortality and high longevity among the general population, how does it compare with the tribals as a whole and again how does it compare with each of the unique tribal communities in Kerala. What is the literacy and educational standard achieved by the different tribal communities in Kerala and how does it compare with rest of society? Answers to these questions

would be a wake up call that will hopefully induce a corrective action that can remove the disparities without any more delay.

How best the different executive departments of the government and the Panchayat can join together to improve the condition of the tribal community has to be carefully examined. The Panchayat being the nearest government agency with sufficient knowledge of the local situation would make it the first choice for coordinating and implementing a pro-active agenda for tribal development. The new Tribal Rights Act replaces the authority, earlier exercised by the Forest Department over the tribal community with that of the Revenue Department and places the Village Officer, the RDO and the District Collector as the appellant authorities at various levels. When it fully operationalised, the role of the Forest Department will be diminished or marginalized. However, as the Forest Department is responsible for forest conservation, they have a stake in the welfare and development of the tribal community in the forest, and they are the only agency with a local presence in the field. Therefore it is important for the Forest Department to co-operate with whichever agency is ultimately made responsible for tribal development and has the capacity as to ensure the integrity of forests and long term conservation.

Ideally the general body meetings of VSS must be recognized as the Gramasabha meeting in the locality of the Panchayat. If there is any difficulty in harmonizing the Panchayat meeting schedule and that of the VSS, the best thing to do would be to call the general body meeting exactly on the venue and time of the Gramasabha meeting. The only difference is that the president and secretary of the VSS may not get an opportunity to preside over the function; however they can contribute to the proceedings as members of the Gramasabha. As the Forest Rights Act 2006 is an Act of Parliament and the Rules are framed by the Central Government, it is not easy to modify the prescribed rules and procedures to suit all local situations. Within the frame work of the Act and Rules, the VSS as an institution or as a collective of individuals can pursue their goals, if the VSS is active and strong. Democratic procedures have a potential to generate a dynamism and enthusiasm to address common issues and to collectively think about solving complex local problems. How best the VSS can unleash the democratic potential within the local community would depend up on the commitment of the VSS secretary and members of the executive committee in creating a transparent and regular schedule of functioning. An active VSS can

compel the Forest officials to act favourably and to avoid delays in routine matters that hinder the progress of the democratic VSS movement.

It is unrealistic to expect the Panchayat to show empathy to the tribals and to protect their interests always. The elected Panchayat members, including the Presidents have to go by the policies of the political parties to which they belong and also to the electors in these wards. As the members of the tribal community are almost absent at the leadership level of main stream political parties and since the tribals are such a small minority even within a Panchayat, tribal issues will naturally be neglected. If there happens to be a conflict between the interests of the tribals and non-tribal communities, the Panchayat leadership will invariably align with the non-tribals groups. On the individual level many Panchayat members would be sympathetic to the problems of the tribals, but political exigencies and group interests come in the way. Therefore, it is essential to have a strong legal and institutional frame work beyond relying on the goodwill of the Panchayat members and individual government officials at various levels to assure the normal citizens' rights and the special Constitutional guarantee towards the tribals. In short, there should be a level of appeal, beyond the political Panchayat and the bureaucratic government agencies such as an empowered Tribal Commission that do not require engaging of expensive lawyers and wait for decades, as in any normal legal proceedings. When the poor and destitute tribals approach a court against a powerful adversary who has the resources to avail the benefit of appeals up to the Supreme Court at every level of the proceedings, the final outcome would inevitably be prolonged delays and total ruin in the process of shuttling regularly to the courts and paying exorbitant legal fees.

There need not be great optimism regarding the effectiveness of a new approach or a sudden transformation of the situation in the immediate future, since the forces that have thwarted the well meaning efforts in the past will resist any move to empower the tribals and consequently undermine the vested interests that benefit from the present situation. However, there is bound to be an awakening to the environmental and social crisis facing the planet and India may be one of the countries that may take a new path in the face of multiple challenges and crisis on many fronts.

8.10 Grounds for optimism

Societies which are affluent, democratic and proud of their heritage have taken care to conserve their natural resources and heritage. It is the democratic element that mold public opinion and compel governments to frame laws and implement programmes for the conservation of forest and natural resources. Autocratic rule has invariably led to rapid exploitation of natural resources across nations and expressions of environmental concern are considered as treason in such situations. The examples of Switzerland and Japan are relevant here. In both places the natural forests and natural landscape have been well conserved. Partly it is due to their affluence that they can invest in conservation or resist the temptation to exploit or exhaust them in the short run. It is also the national pride in their heritage that creates a social consensus for the preservation of their natural treasures.

Kerala can't be compared with either of the above mentioned countries. We are much too poor and our national pride is debatable, considering our neglect of even the basic component of our culture; our Malayalam language which is viewed by many as a liability. How can a people who disrespect their language, as we do, have any self respect, let alone respect for the natural heritage of the land? This is a complex question and the answers lie perhaps in the lack of employment opportunity that have compelled generations of Malayalies to migrate to other parts of India and the world for employment and income. The neglect of Malayalam may be a passing phase in our struggle for survival in a competitive world, where high density of population left many with insufficient land to survive on agriculture. The bright side is that Kerala is one of the most literate states in India (Haryana has overtaken us) and media penetration in both print and television is extremely high and diverse. Social processes which used to be very slow can be accelerated with media coverage and activism.

The high literacy and media activism can exert substantial political influence which any Government in Kerala cannot ignore. Environmental conservation and social justice issues could, at some point in the future emerge as important political issues which an enlightened population may compel the Government to act with wisdom and compassion. The negligible numbers of the tribal population and their scattered settlements, added to there diverse tribal identities make them extremely helpless as a political force. However, if leading literary and social personalities and the media take up their cause and put forth an actionable plan

to uplift the condition of the tribal population, it is sure to be successful. The power of the visual media and its impact on society was very much evident during the campaign for a ban on the toxic endosulphan insecticides globally. Although the ban could not be implemented at the national level nor could the official Indian delegation be compelled to take a strong stand for the health of the population and the soil, there was a fairly universal consensus within Kerala on the issue which cut across political, geographic and class lines for the total ban on a pesticide that was reportedly causing acute human health problems and deformities.

The above example shows that although our ability to influence the national policy is limited, social activists with the help of the media can mount a forceful campaign to highlight social problems and political organizations will be compelled to take a public stand on these issues. No respectable political party or organization can take a public stand justifying the oppressive degraded condition of the tribal population of Kerala. Their relative poverty, education, health and nutritional status is appalling.

Once a social and media campaign attains a critical momentum, the political parties and the judiciary is bound to take notice. The Human Rights Commission or even the High Court can order a detailed study of the living condition, educational and employment status of each of the different tribal communities. They can further direct the executive to present credible policy measures to overcome the acute debilities suffered by this marginalized minority. Of course sociological studies would be required to identify the nuances of the problem and to suggest sequential and incremental measures necessary for a genuine uplift of the tribal condition.

It is in this context that a specific and dedicated statutory Kerala State Tribal Commission can become useful. When such a commission is headed by a sitting High Court Judge or a retired Chief Justice with its own investigative machinery, the neglect of the tribal community during the entire post independence period could be corrected. If the annual report of the State Tribal Commission is required to be tabled in the Kerala legislature along with its recommendations for discussion and appropriate legislative action, then there will be a radical overhaul of the current practice of different Government agencies, staffed almost entirely by non-tribals, proposing schemes or projects in the name of tribal welfare to meet certain financial targets and no social audit or evaluation of the actual

benefit of such activities. The beneficiaries of such programmes have mostly been the contractors associated with different Government Departments and the bureaucrats implementing them. The leakage along the line, leaves very little for any substantial change in the quality of life for the tribal families - this situation must change.

The deficiencies of the VSS and the PFM programme should not lead to underestimating its importance to forest conservation. At a time when extensive forests have been lost to plantation and agricultural expansion, extraction of timber and NWFP, building of dams and creation of elaborate networks of roads, canals and power lines dismembering the forests that have welcomed encroachments, commercial activities and fast moving vehicles into forest, reflecting a failure of conservation and the failure of the Forest Department to protect the forest; this experiment with PFM is perhaps the last stand against the complete destruction and degradation of the forests, using the energy and spirit of democracy to protect and conserve the forest by the Forest Department in partnership with the local residents, who were neglected and ignored this far. If the PFM experiment fails, the Forest Department and the Government will be left helpless in its efforts to conserve the forest, during this liberalized and globalized era were powerful multinational corporations linkup with powerful media houses, political parties, communal organizations and local NGOs to further the economic agenda of the most powerful and restless gamblers. Profit seeking corporates and their local collaborators who have no responsibilities or interest in the survival of the tribal population or the sustainability of a local forest area or even in the long-term survival of life on the planet, such as the real threat of global warming, environmental catastrophe or of nuclear holocaust, cannot be depended upon to protect the people or the environment in the absence of a healthy democracy and strong regulatory systems.

8.11 Human resource development

Symbolic gestures of concern and charity such as organizing a one day medical camp, distributing some seedlings, poultry or livestock or building a few houses of the cheapest kind without access to potable water and sanitation are truly symbolic gestures. They do not add up to development which only good quality education can provide.

Development is a long term programme and it is necessary to focus on children, their health, nutrition, education opportunity to build a healthy and developed

nation. Rather than focus on the GDP growth or the achievements of the speculative financial sector, the focus should be on the distributive aspects and to ensure inclusive growth. It is critically important to focus on the girl child in the tribal hamlets. It would be consistent with the vision of the founders of modern India, Mohandas Gandhi and Baba Saheb Ambedkar.

If the state and the government refocused its attention to the development of children of the tribal population in India and prepared suitable indices to monitor their achievement in education, skill development, employment, income, asset formation, participation in the democratic process and achieving positions of power and influence in the political, executive, judicial and educational sector of the country; then, if their growth trajectory equals or approaches that of the mainstream or urban privileged sections, we can be sure that we are on a sustainable development path. On the contrary it will be disastrous if a minority of the very rich leads a destructive lifestyle damaging the environment and harming the livelihood of the vast majority of the rural poor, below whom the tribals struggle to survive.

The fundamental change that is required in society is in the attitude of the mainstream society, the government, educational institutions, the judiciary, the police and the local political leadership towards the tribals. It must be understood and accepted that the tribals have a Constitutional right to live in dignity. Government officers, teachers, and the personnel of the Education Department must be sensitized to interact with compassion towards the tribals and to listen to their complaints if any. The behaviour of outsiders particularly, the liquor mafia, the traders and the employers of tribals must be monitored to ensure that the tribals are not harassed or cheated.

The law passed by the Kerala legislature to restore the alienated lands owned by the tribals and occupied by the encroachers has lapsed without even issuing the rules for its implementation during the subsequent three decades. The Attappadi area in Palakkad district where there is a concentration of tribals has received a substantial amount of funding in the name of tribal welfare. However crimes against tribals are rarely recorded and almost always never successfully prosecuted. The tragic case of very large number of unmarried mothers, some of them in their adolescence are just media stories helping to boost a circulation or TRP ratings and rarely the subject of serious criminal prosecution and conviction of offenders. News stories of atrocities against tribals, even that of child

molestation, do not agitate political parties or social activists which allow the perpetrators to escape conviction and persist in their vices. The inordinate delay in prosecution and the lack of political and media support for the victims systematically denies justice and undermines the credibility of institutions of the State. The case of a statutory Tribal Commission with powers of investigation and prosecution can change the situation to some extent.

It is true that the most tribals consume liquor and act inappropriately under its influence. It is also true that some of them do not promptly return loans taken. But this is an area, which the government should study carefully and adopt a long term strategy to wean the addicts and to protect the children from its negative impact.

Of the two components of the eco-system, the forest and the people, we can see that during the last three decades the forest have improved in the Vaniampuzha area due to the stopping of timber operations by the Forest Department, the ceasing of charcoal burning by the local people within the forest and the reduction in hunting of wildlife in the area. While the forest has relatively improved, the condition of the human population shows a mixed result. There have been changes in the educational front. A beginning has been made with access to education. The Government agencies have stepped in with provision of houses built of laterite stones with roof of tiles initially, and now with concrete, which is much safer as protection against elephants. Some efforts at providing water supply, establishing Anganwadies for the children and the beginning with VSS point to a betterment of their condition. However the malnutrition among the children particularly and the entire population is very evident. In a fast changing world outside the tribal settlements in rest of Kerala, the condition of the tribals in Vaniampuzha is extremely pitiable.

The Forest Department which leads the VSS, has neither social workers, nutritionists, health workers or any of the specialists required to guide the population away from their addiction to liquor. The other agencies like Tribal Welfare Department, Agriculture Department, Panchayat etc. suffer from the same deficiency and they are attuned to provide some materials like seedlings, goats, live stock or funding for civil works such as houses, roads etc. They have no programme for human-development activities. It is here that even the small investment in education becomes critically important. Although the immediate

change may be very small or even very imperceptible, it is bound to have some positive impact at some point in the future.

8.12 Conflict between forest conservation and economic activities

Conservation of forest requires allowing nature to take its course, and the forests with all its biodiversity and landscape values to be preserved for posterity. In case forests have been damaged by fire, or other destructive human activities, it requires care and nurturing of the area to bring it back to its original composition and quality. The Forest Department's task is to protect the forests which imply preventing activities that are detrimental to forest conservation such as clearing natural vegetation and changing the land use. Forest integrity is the most critical aspect to be protected since the forest ecosystem is an ecological wealth of interrelationship that will be disrupted when forests are opened up by roads and human activities like monoculture plantations, agriculture, dam construction and urbanization activities. Invasion by weeds and pests, felling of trees and extraction of valuable materials, from medicinal plants to minerals, often accompany the expansion of road network and greater human activity in the forest. Forest fires caused by negligence or deliberately induced for some short term gain is one of the inevitable consequences of human activity in forest. A few hours or days of forest fire may require decades or more of protection to bring it back to its original composition. Even then, the more sensitive species may never come back or can become locally extinct.

Livestock, particularly goats have an adverse impact on regeneration of the forest since they browse on the young seedlings and sapling on the forest floor. For an agricultural family, these animals are beneficial for income generation and for inputs to the farm in the nature of manure, they also are a source of conflict. Forest areas are the abode of wildlife, including carnivores that consider goats and livestock as natural prey. Maintaining goats and livestock inside the forest is detrimental to forest regeneration and also causes man-wildlife conflicts. When a leopard or tiger kills a domestic animal, farmers are tempted to take revenge by poisoning or killing the predator. The Forest Department offers to compensate the loss suffered by the farmers, however the delay in official procedures and quantum of compensation offered may not be satisfying. Ideally, domestic animals, that compete with the wild herbivores and that attract carnivores to a human settlement within the forest must be avoided.

Government agencies such as the Tribal Welfare Department, Agricultural Department and the Panchayat have schemes to distribute goats, cows and buffalos to tribal families free of cost. It is natural that what is offered free is eagerly accepted even by families who do not have a tradition or know-how for animal rearing. Such free gifts are fairly quickly disposed off by the recipients, who neither have a clue to the value of the animal or the current market rates. Outsiders quickly buy them off for a pittance, thereby wasting government money. For all government transactions, there are middlemen or contractors who thrive in supplying these animals to the Government agencies, who would also be in the know of where they are distributed as gifts. Naturally such people can make a double profit of selling the animal to the Government in the first place and buying it back from the beneficiaries at a greater profit.

While some agencies like ITDP provide material items such as livestock, seedlings, houses etc to the forest dwelling tribal households, agencies like Panchayat provide employment under the MGREGS. The conflict between conservation and economic activities is again quite stark here. Employment generation scheme normally involve weeding an area, scrape weeding with a spade, for which the Malayalam word is *kadu vettu* (clearing jungle). In natural forest areas with profuse regeneration of natural seedlings endemic to the area, such jungle clearing activities are particularly destructive. Even in areas outside the forest, employment generation activities under the MGREGS take up the activities of clear weeding road sides and areas on the fringes of ponds, water courses etc. Although it may appear to contribute to development this activity results in eliminating small strips or patches of natural biodiversity which would also contain species of medicinal importance. Scraping away the vegetation from such areas and often burning them will accelerate soil erosion during the heavy monsoons and eliminate the possibilities of regeneration of natural biodiversity for which Kerala is famous. The elimination of the normal vegetation will result in colonization by more aggressive and sometimes exotic weeds that will necessitate repeated weeding in the future. New and innovative ways of employment creation that does not destroy the natural biodiversity and conservation values must be devised so that the government sponsored employment generation scheme do not result in an ecological disaster.

8.13 Agriculture

The normal extension services to the rural community is the distribution of seeds and seedlings of commercial crops, fertilizer subsidies, distribution of livestock, goats poultry etc. In a farming community, away from the forest, which has a tradition of settled agriculture these inputs and credit facilities for farming are extremely useful. In a tribal community living within the forest, with no background in agriculture, no familiarity with agricultural tools and total ignorance of the crop calendar, the subtleties and intricacies of irrigation and pest management; the distribution of such inputs may not create the expected benefits. The greater danger and tragedy is that most of the commercial crops attract the attention and visits by the wild animals like elephant, boar, deer, porcupines etc. to damage the crops raised within the forest. Once the wildlife in the area get attracted to edible crops in the locality, they will keep coming and partake of the fruits of labour without appreciating that it harms the interests of the new farmers. Cultivation within the forest is therefore at great risk of attracting unwelcome visits from wildlife and government agencies that promote such cultivation within forest are indirectly promoting human-wildlife conflicts that cause distress to both parties.

When such conflicts arise at the first level, the demand is for electric fences and trenches from public agencies such as the Forest Department. It is very rarely that such infrastructure of electric fences and trenches are maintained properly to prevent entry of wild life in to a settlement. Most of the time, these are built only for a short distance, so that the animals can easily walk around them. The quality of construction and workmanship by contractors working in the forest without intensive supervision often create very shoddy structures that do not stand even for one season. The electric fencing in Vaniampuzha and Tharippapotti settlements have entirely collapsed and it is reported that it did not work even for a day. Some forest officials on the other hand, blame the tribals for destroying the fencing in the aftermath of drunken revels. The fact that the design of the electric fence and the quality of work was deficient should not obscure the fact that it is impossible to keep away wildlife from a forest settlement which has crops that attract wildlife to it by erecting an electric fence. A better long term strategy would be to consider a crop mix of tree and other vegetation that are not attractive food for wild animals.

The survival of wildlife within the forest is already threatened by the plantation owners and farmers bordering the forest with their licensed and unlicensed 'crop protection guns'. Even in the nearby public sector PCK Rubber Plantation adjoining Vaniampuzha in the forest, there is a sanctioned post of 'Gun Man' who is supposed to be a professional shooter of unwelcomes wildlife. The current Government policy encourages shooting of wild boar after notifying the local forest officials. Demands for guns and gun licenses could spurt in all areas adjoining forests, particularly in tribal settlements for crop protection. When Planters and farmers can have them, why not the tribals? Very soon tourist resorts which have come up all over the forest and plantation areas will demand gun licenses for their tourist guides who accompany their customers into the forest for eco-tourism and pure recreation. This small and patchy extent of forest in Kerala will be devoid of all wildlife in a short time if guns are introduced in the name of crop protection, tourist protection or even self protection of the forest officials. Guns are offensive weapons and it takes great restraint not to use them when tempted with game at close quarters by those without a strong commitment towards conservation. Recruitment to the forest department is on the basis of competitive examinations and physical standards where the psychological orientation and conservation commitment is never examined before or after entering service. Therefore, when it is difficult to ensure that the firearms carried by officials will not be used against wild animals how can it be ensured that the fire arms carried by planters and farmers will never be used against wild life which are supposed to be protected within the forest. Therefore, in the interests of wild life conservation and peaceful human existence, offensive weapons like guns must be eliminated from the forests, its periphery and ideally from the entire landscape.

Sustainable livelihood anywhere must be compatible with the local resource base and the limits of the environment. Settlements within the forest must take into account the presence of wild life and limit their intervention and modification of the vegetation within forest in such a way that do not attract wildlife into it. Planting of banana, areca nut, coconut, Jack etc. inevitably attract wildlife to the settlement. These crops much not are encouraged by government agencies in settlements within forest. Livelihood opportunities for those traditionally dependent of forests are limited to the harvesting of natural resources; however, the possibility of intensifying exploitation of the forest is both limited and undesirable. A livelihood based on forest is sustainable only at a very low level of

resource extraction and very low level of income. Such life style becomes bearable and sustainable only when the forest provides food and other necessities for survival. When the forest dependent population switch over to the market economy for food and other essentials, their ability to survive with the small seasonal income from the collection of wild produce from the forest, becomes extremely tenuous.

In the early and mid 20th century Kerala, there was a surge of interest in agriculture. Communities that were tenants or landless got an opportunity to own agriculture land and the Government also stepped in to promote reclamation of Kayal lands for paddy cultivation and promotion of paddy cultivation in the valleys of the forests during the difficult times of Great Depression and the Second World War. During this period there was both a massive expansion of the area under cultivation and also rise in the productivity of crops due to the enthusiasm of the innovative farmers and also the support of various government agencies. But after 1975, there has been a continuous decline in the agricultural output and productivity in Kerala along with a rapid decline in the area under food crops. Farmers in agriculture intensive areas such as Wayanad, famous for its deep soil and congenial climate are finding agriculture unremunerative as the paddy farmers and there are reports of farmer suicides after getting entrapped in credit schemes that attach their farms for default. It is unlikely that the tribals, particularly those in Vaniampuzha with no background or familiarity with agriculture and with very small area of holdings, often with less than 10 cents of land, can successfully manage to survive on an income or output from agriculture. The older generation with their knowledge of the forest and their lack of education or marketable skills may continue with their present livelihood strategies for want of better choices, but it is imperative that the new generation must find employment elsewhere to secure an income sufficient to meet the requirements of dignified life in a highly commercialised market-linked society. Only an accelerated pace of education development can provide such opportunities. In short a sustainable livelihood based on agriculture within one's homestead farm is impossible for the tribal community living within the forest due to two principal reasons: i) The extremely small extent of land, and ii) The impossibility of effectively protecting the crops from wild life damage

There are several external factors which reinforce each other to perpetuate the poverty, powerlessness and marginalisation of the tribal population. Indirectly, it

causes degradation of the forest which nurtured them for generations. The hangover of the past feudal and caste differentiated society creates a kind of scorn among the majority non-tribal population towards the tribals, forming the lowest rung of the hierarchy. Social and economic changes have created a situation in which poverty which was a normal and universal condition is now a matter of shame and exclusion. Affluent members of the society consider themselves smart and worthy of their success and wealth; those who remain poor are seen as lazy or shirkers of work, who are to be blamed for their poor condition. The poverty of the tribals, shabby appearance, illiteracy and above all, a perceived notion that the tribals are seekers of charity and defaulters of debt and commitments, contribute to this attitude. The prevalence of such notions among officials, employers, traders, teachers, health workers and political leaders makes it difficult for the tribals to secure their just entitlements, and even to be treated with courtesy and dignity.

Political changes have led to political organization among the non-tribal population so that the arrogance of officialdom has been blunted in their case. However, the lack of such organization and education has perpetuated the colonial style of relationship between field officials and the tribal population. It would not be an exaggeration to say that some officials consider the tribal population as illegitimate residents on government land and they are bound to serve government departments as bonded labour. They are expected to obey the dictates and summons by the field functionaries, while their complaints never get the attention they deserve. The Forest Rights Acts 2006 is bound to radically alter the situation in course of time. But at the moment, its impact is not yet perceptible.

Among the general population, there is a sense of resentment against reservations in education and government jobs for tribals with lesser "merit". Historically right wing conservative organizations have actively campaigned to eliminate such reservations. The tribals are seen by them as a group who contribute little to the exchequer and business, while at the same time receive much government charities and subsidies. On the other hand, whatever little is set apart for tribal development do little to enhance human development of the tribals or to provide productive assets or even skills. The lack of a vision for tribal development makes the Government effort seem like charity and which provide no sustainable development prospect. The lack of a sincere concern or

commitment to tribal welfare results in budget outlays for tribal development or tribal area development to be misdirected or misappropriated by those entrusted with the welfare of the tribal community. Therefore on the one hand the non-tribal population feel resentment towards the reservations and welfare programmes for the tribals, the tribals themselves get very little benefit out of most of these programmes.

Due to the lack of a proper vision and coordinated endeavour, many Government Departments and Local Government institutions indulge in activities in the name of tribal welfare or development which work at cross purposes. Several agencies such as the Forest Department, The Panchayat and the Block Panchayat have programmes for building roads. In the case of housing all these agencies and the Tribal Welfare Department have programmes. All of them have programmes for providing water supplies, digging wells, building water tanks, laying pipelines etc. Some of them provide goats, cows, poultry etc. even to residents inside forest and along with the agriculture department; some of them provide seedlings of tree crops including rubber and seeds of vegetables. There is a subsidy component for all of them. However, the diversity of organization and their short term programmes makes them almost impossible to monitor or access and there is no agency which comprehensively documents the government investments that go into a Tribal settlement or the households in a settlement. What can be accessed, with great difficulty, is a consolidated figure for all the hamlets together in a region. There are some financial targets for Tribal welfare and there is a Tribal sub plan which several agencies have to meet. Beyond meeting the financial target and observing the financial procedures, there is hardly any social audit conducted on these schemes, nor is there a feedback mechanism to evaluate the efficacies of these schemes.

Although financial assets, education, land, positions in society are important assets for individuals and families, social networking or the ability to access social and community networks is a very important asset for the entire spectrum of society. For the rich and powerful, the social and community network enable retaining of their wealth and status; to the poor and the powerless, such networks are a lifeline for survival in difficult or challenging situations. The social reality in Kerala, as in the rest of India, is that the dominant community groups are well organized and well entrenched in all important realms of life such as politics, bureaucracy, judiciary, police, education, the media and health care

sectors. These community networks not only provide necessary help and support to their members, they also protect wrong doers among them accused of corruption or misbehaviour with other communities. The tribals in Kerala are doubly disadvantaged in that they are the poorest of the poor in the State and their numbers are miniscule even when considered together. Divided into their different community affinities, geographic scattering and diversity in dialects makes them totally insignificant by any standards. Gone are the days when there was a semblance of community integrity and unity within the community. Many of them had a system of hereditary headship or systems of community decision making involving the community elders on matters relating to that group. The Mala Arayans, Muthuvans, Mannans and the Kanis still have a continuity of the earlier systems of community cohesion. The settlements at Vaniampuzha have long lost such social cohesion or unity which makes them totally helpless and unable to avail the benefits of social networking in times of need. This creates a barrier for communication and the sense of solidarity between the tribals and the rest of the society. Because of the poverty and the lack of social networking skills, the tribals end up as the accused in wildlife hunting cases and illegal brewing of liquor even when the main culprits escape the net due to their social connections, ability to bribe or postpone legal action.

When the tribals get entangled in court cases, they suffer exceedingly and disproportionately to that of the non-tribal population who have the resources to engage successful lawyers and to visit the courts located in towns which are too expensive for the tribals and they often have to starve and stay on the road side for want of money, relatives or social networking capabilities. The prolonged legal procedures are too harassing for the tribals. The pitiable condition of those accused for the death of a police constable in the Muthanga forest, more than a decade ago, during the Police action when an organization of tribals occupied an abandoned eucalypt plantation in the Wayanad Wildlife Sanctuary during which time one tribal was killed in police firing and dozens of tribals were injured in the Police action. Although the tribals accused in the local police case have been acquitted, there is a parallel case continuing in the CBI court at Ernakulam for which the accused tribals have to regularly go to Ernakulam for the scheduled hearings which are routinely postponed to a successive date. The travel expenses from Wayanad to Ernakulam and back is prohibitive for the tribals and if they fail to appear, they can be arrested and sent jail for an indefinite period.

However feeble and insufficient it is, the potential of the VSS to organize the tribals is a challenge to the local traders and other non-tribal people who have been traditionally benefiting by the NWFP collection for the tribals and the cheap firewood they get on their doorstep from indigent tribal women. The local traders who buy the NWFP from the tribals either offer a marginally higher price than that given by the VSS or compel a debtor to honour his debt by bringing sufficient quantity of honey or other valuable materials. Threats and physical abuse are also employed by such people with the full confidence that the tribals will not retaliate nor will any official or Government agency take up the defence of the harassed tribals. The cynical attitude of the tribals due to their long experience of indifference by government agencies and default in honouring promises made by officials and politicians in the past is a great barrier for the earnest officials of the VSS. The lack of trust by the tribals cannot be quickly overcome. The manipulations by outsiders to wreck the VSS as described earlier are also to be reckoned with.

The problem becomes confounded when officials in the Forest Department, at various levels behave inimical to the cause of VSS and delay paper work and fund flow for the programme. While, for the traders and other non-tribals in the periphery of a tribal settlement perceive the VSS as threatening their income and influence with the tribals; for at least some of the forest officials, the VSS is seen as a potential threat that undermines their authority and control and even a competitor in forestry work which traditionally was their prerogative to arrange and execute with the help of a convener. If the VSS ever succeeds, then the worst fears of such forest officials will materialize and the VSS may demand allotment of all forestry work such as fire line clearing, boundary clearing, thinning and maintenance of plantations etc. There is a world of difference in transparency when a work is executed departmentally or through a convener in contrast to that by a VSS. Although uneducated and ignorant, at least some members of the community such as the President and members of the executive committee of the VSS, who are non-officials, will get to see the budget and its components and the extent of work proposed. These have been a matter of official secrecy for a very long period. The Right to Information Act has opened a window to breach such secrecy. But the Forest Department is not of great interest to the hyper active RTI activists as much as some other Departments.

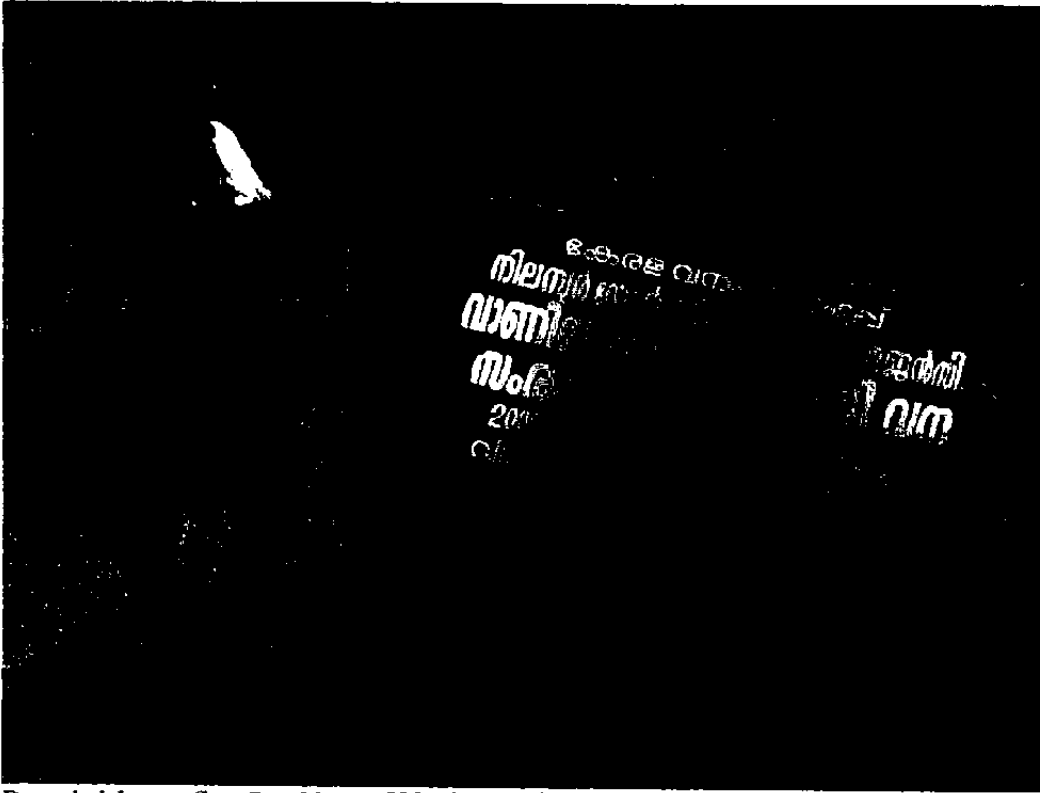
9. CONCLUSION

- Due to degrading poverty, lack of education and poor social networking tribals fail to avail opportunities for education, jobs, travel, business enterprise, political lobbying etc. They are abused, neglected and cheated by mainstream society affecting their self image and dignity
- The community is too weak and powerless to effect change on their own.
- There is limited scope for outside agencies like KFRI or NGOs to effect improvements in the situation
- The local offices of government departments have limited flexibility to modify budgets and plans drawn up and approved by the headquarters.
- The current approach is inappropriate and lacks vision. The State and mainstream society must redirect its policies and efforts.
- An improvement in the situation can come only with a commitment for change from the political establishment, innovative government policies, integrating approaches and activities of various government agencies and suitable planning and budget provisions.

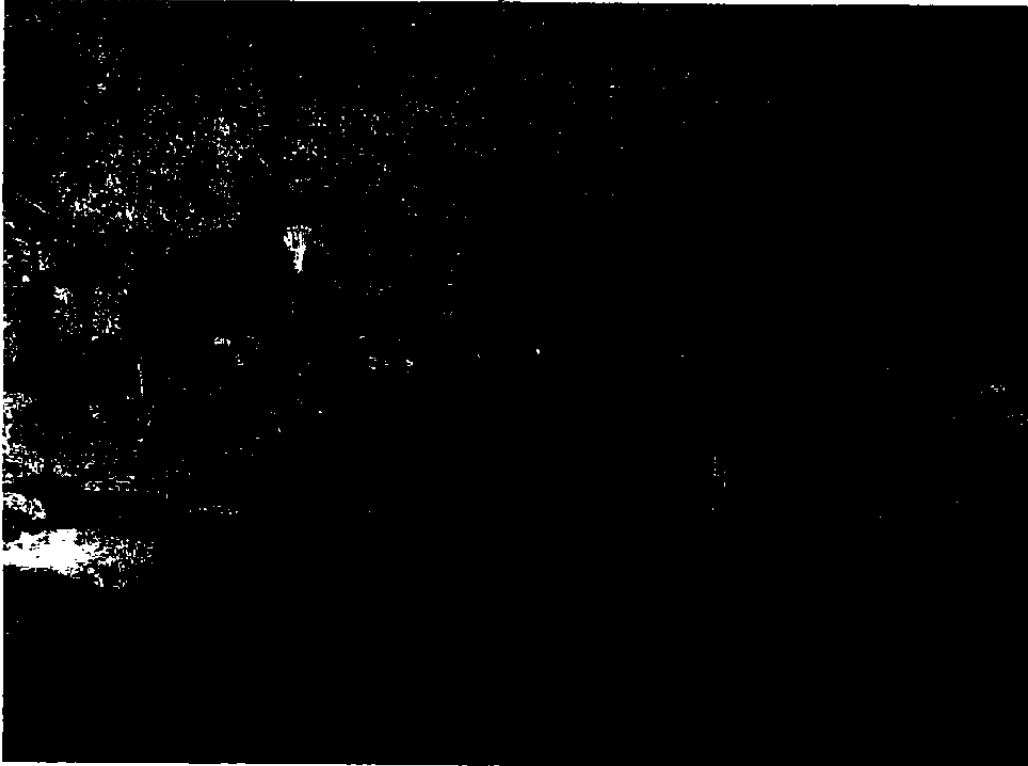
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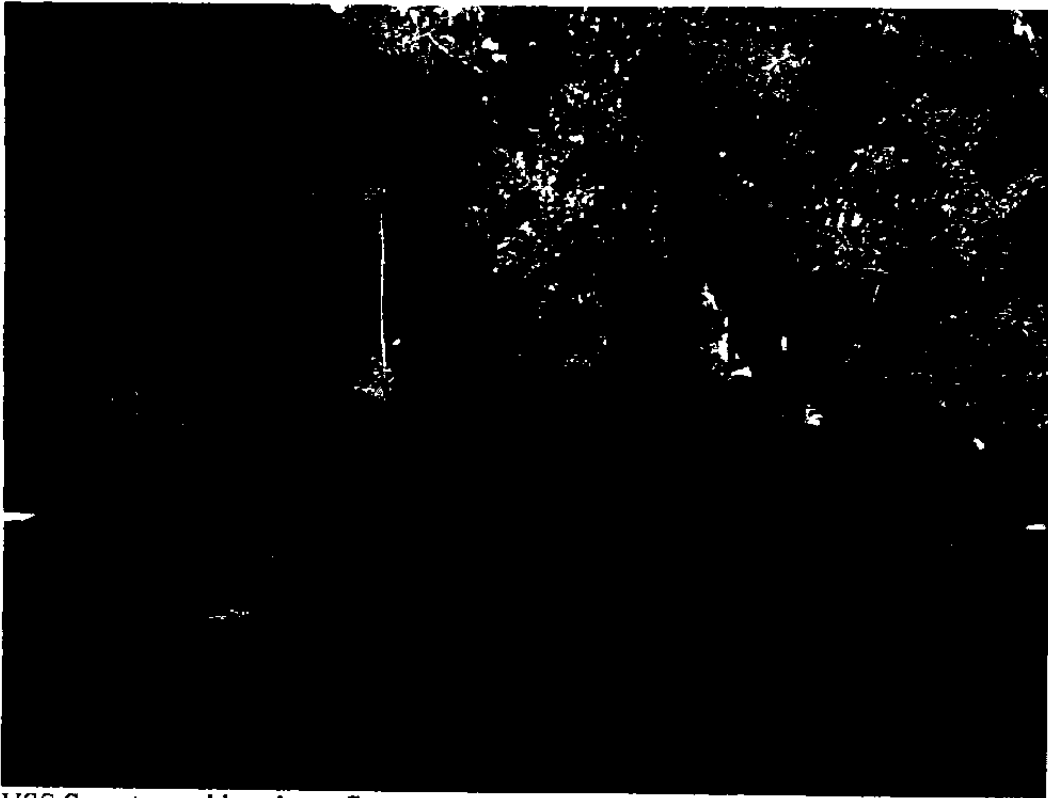
PHOTOGRAPHS FROM THE FIELD



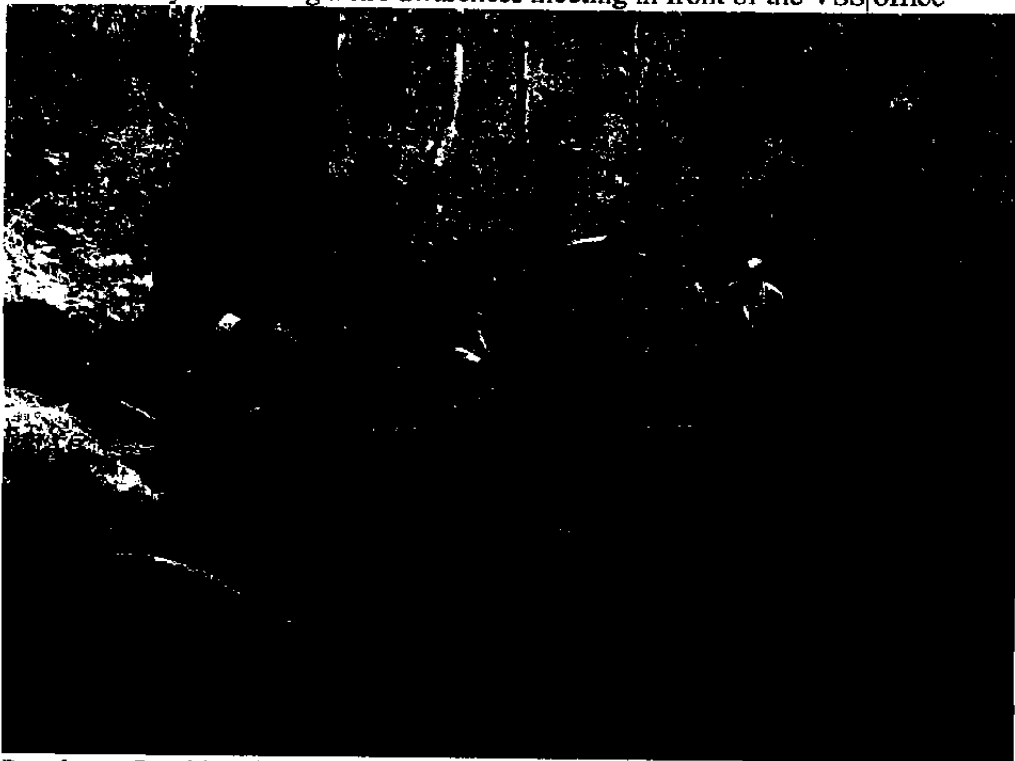
Ramakrishnan, first President of Vaniampuzha TVSS



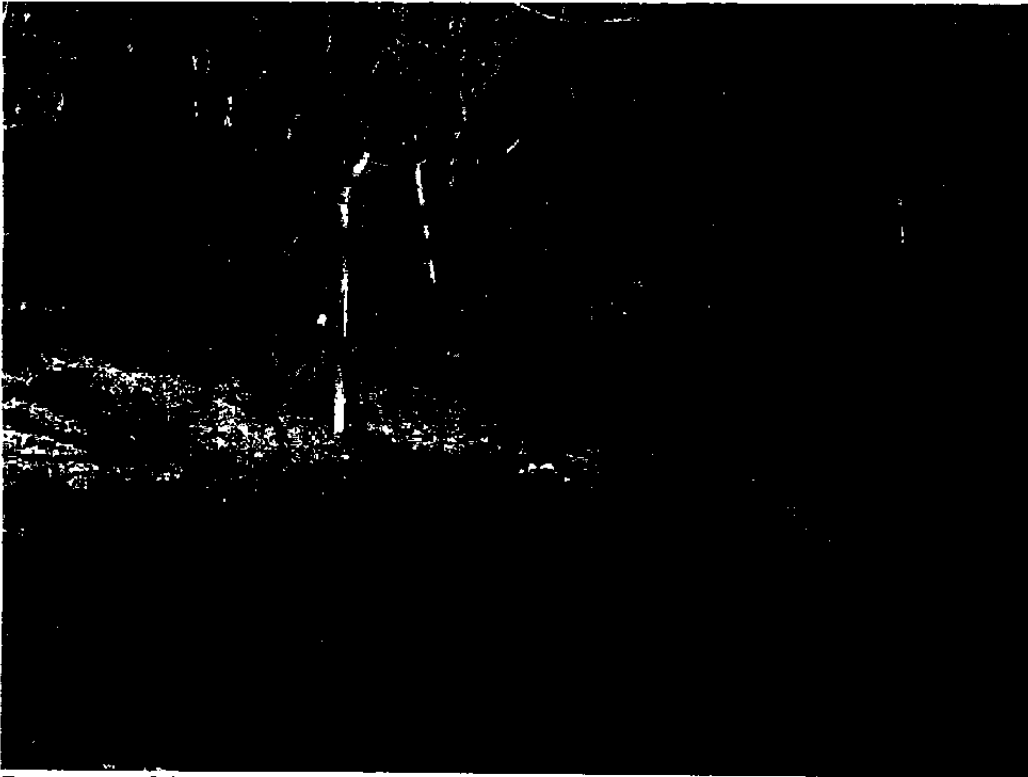
Chemban of Irruttukuthi and few of his family members (See firewood bundles)



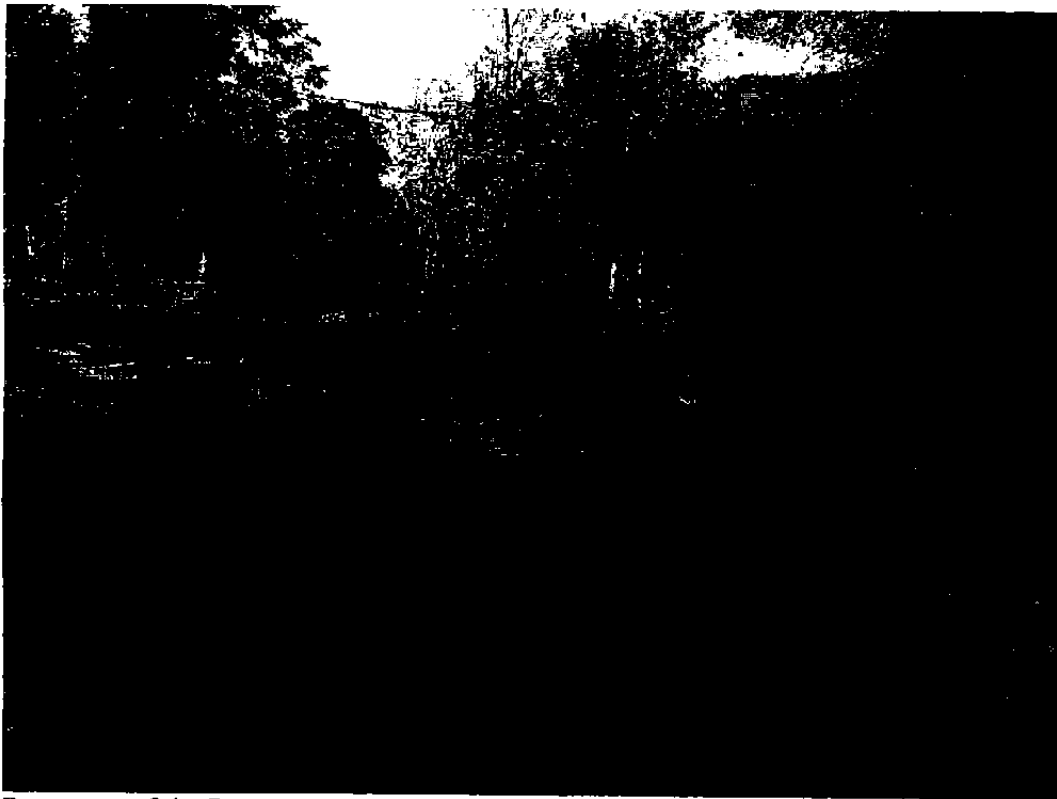
VSS Secretary addressing a fire awareness meeting in front of the VSS office



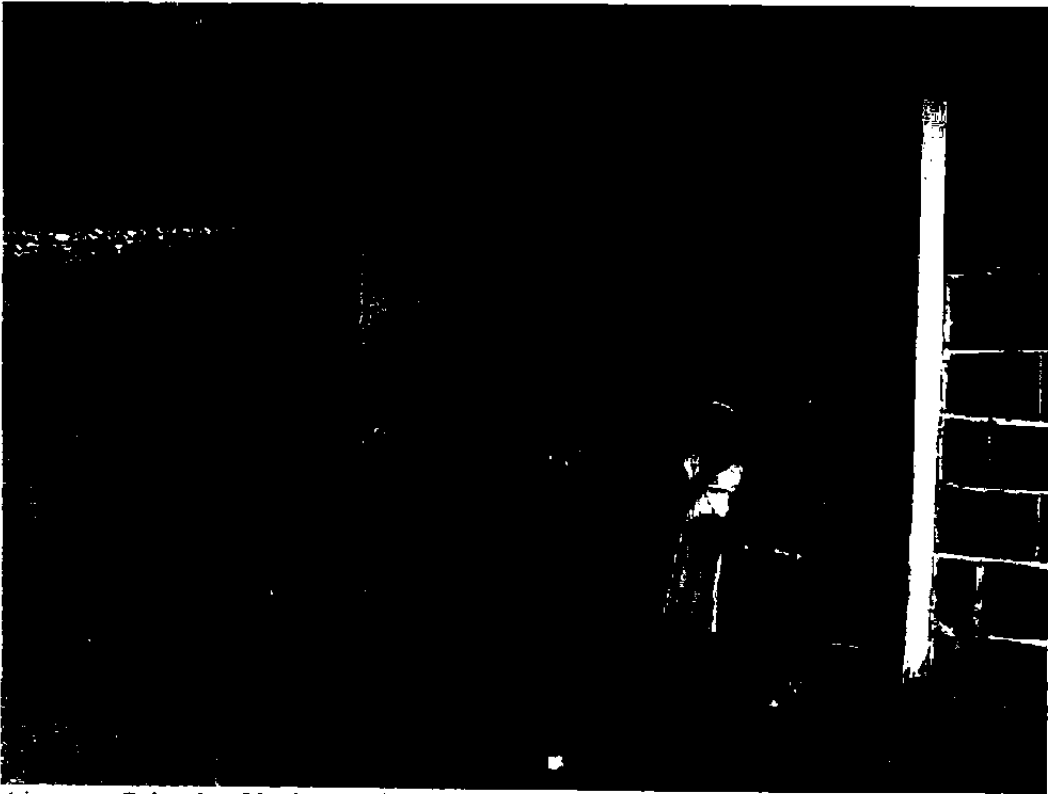
Panchayat President listening to a member at the VSS meeting



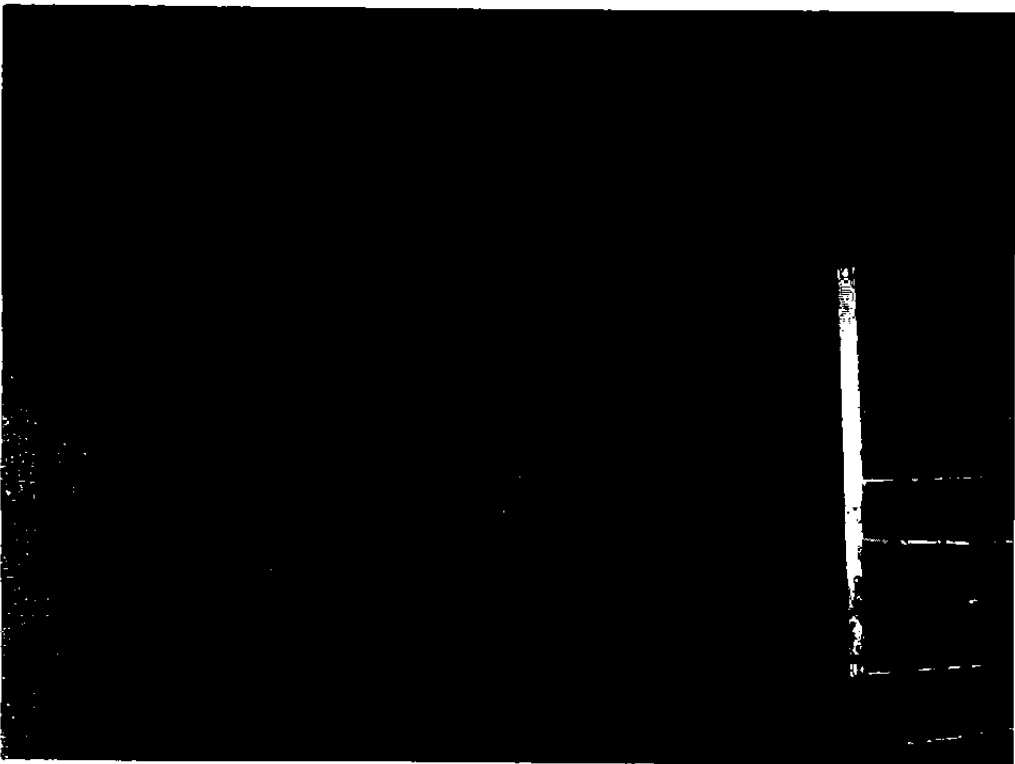
Remnants of the Power Fence at Vaniampuzha



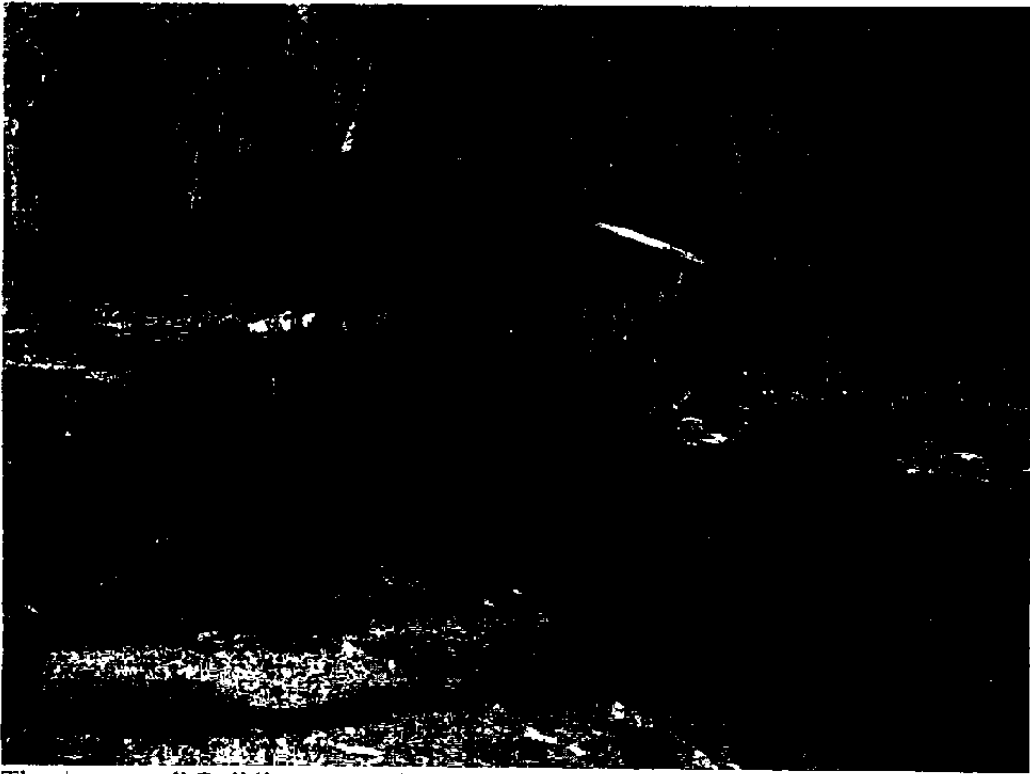
Remnants of the Power Fence



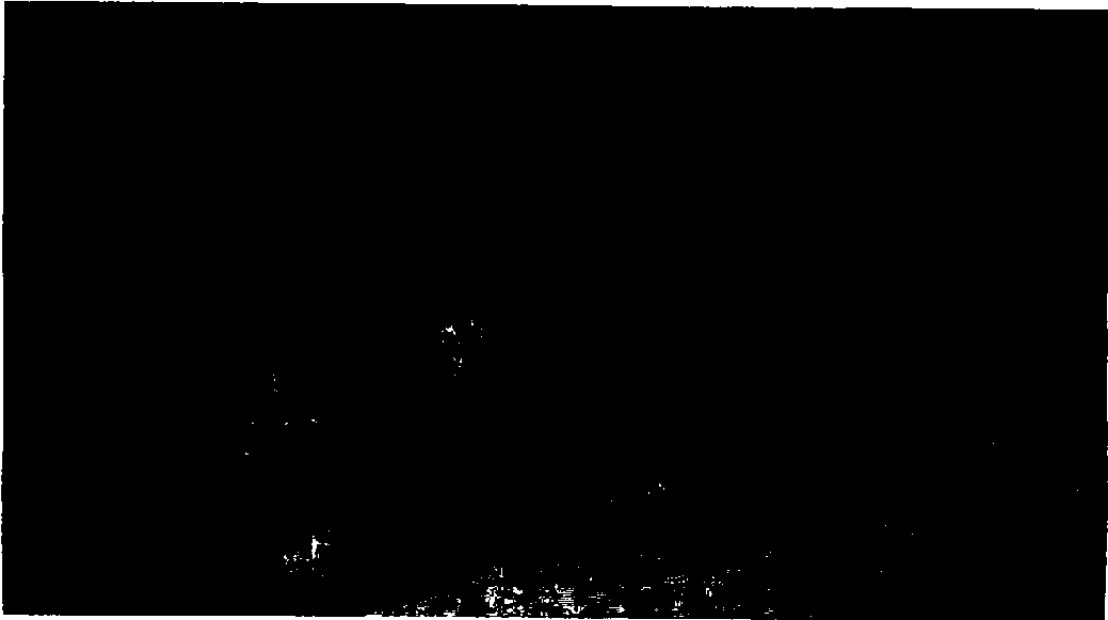
Alternate School at Vaniampuzha



Abdul Gafoor, the Teacher at the Alternate School



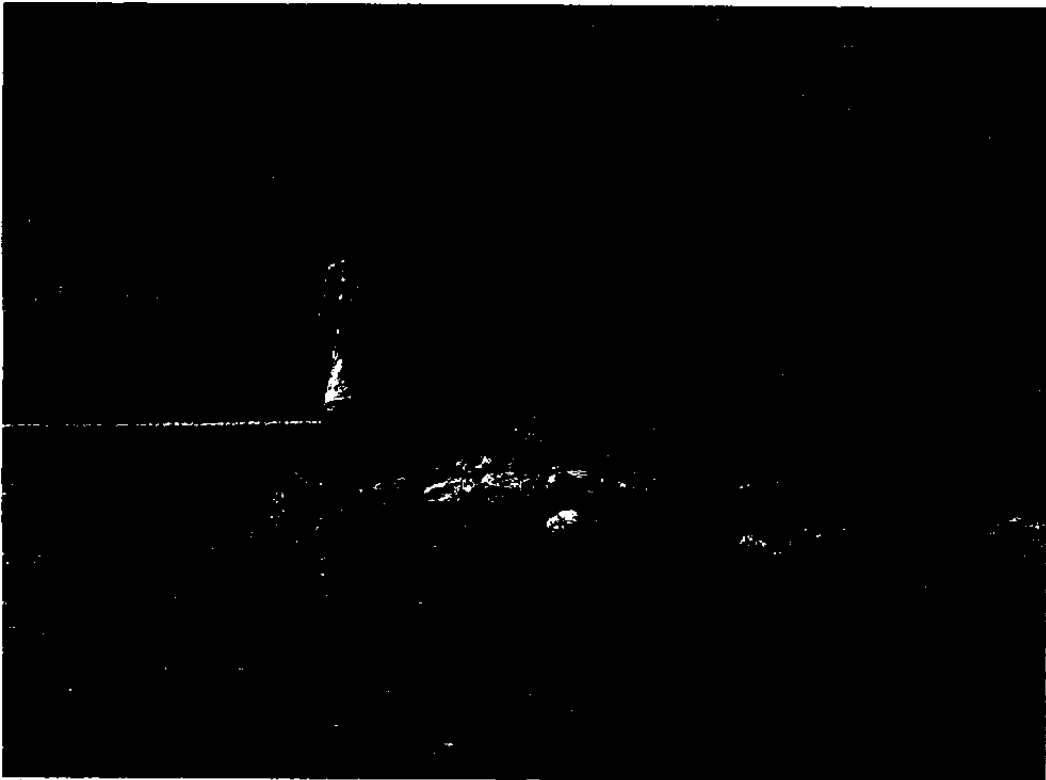
The Anganvadi Building at Kumbalappara



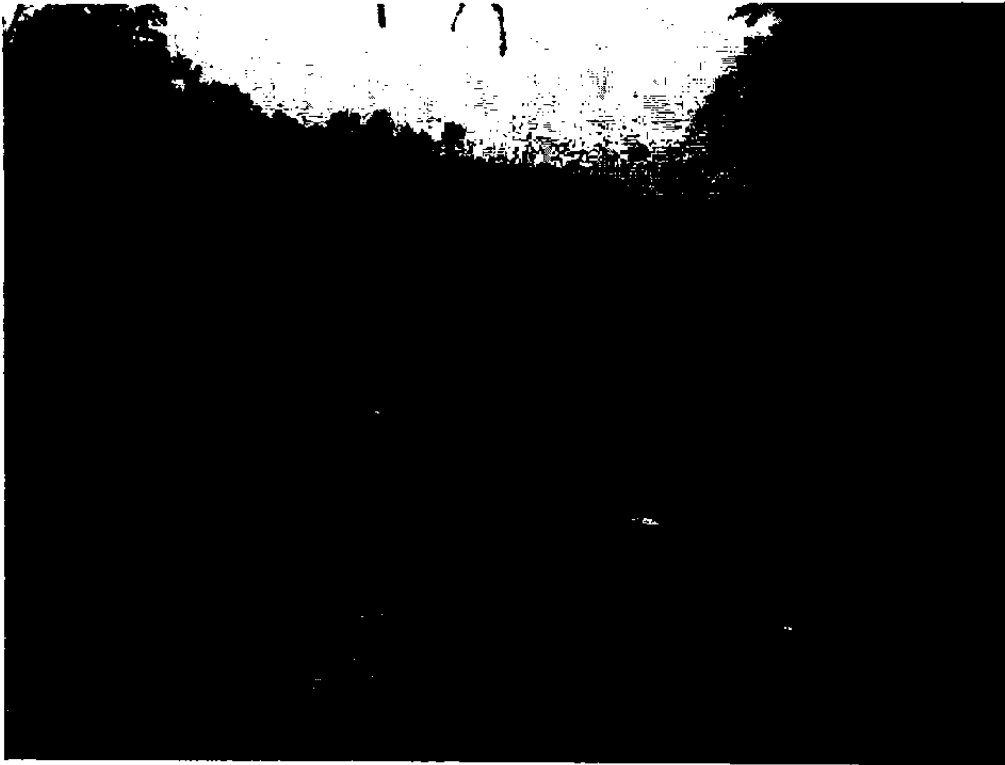
Women and children returning to the hamlet



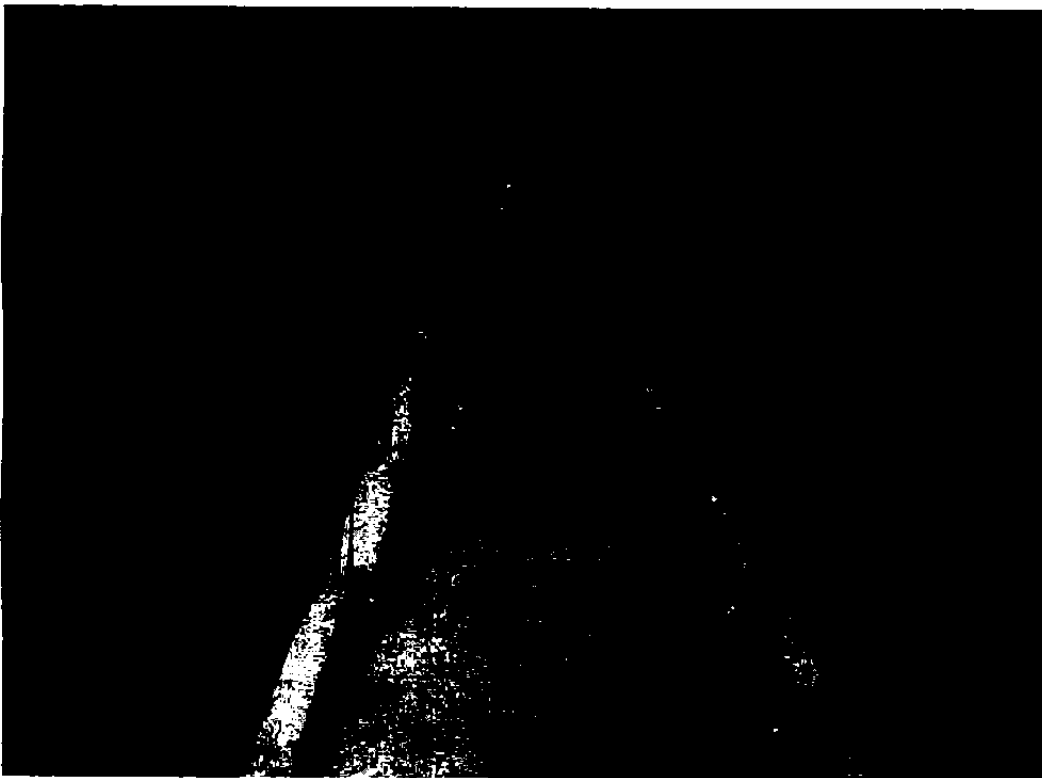
The collapsed first bridge at Iruttukuthi



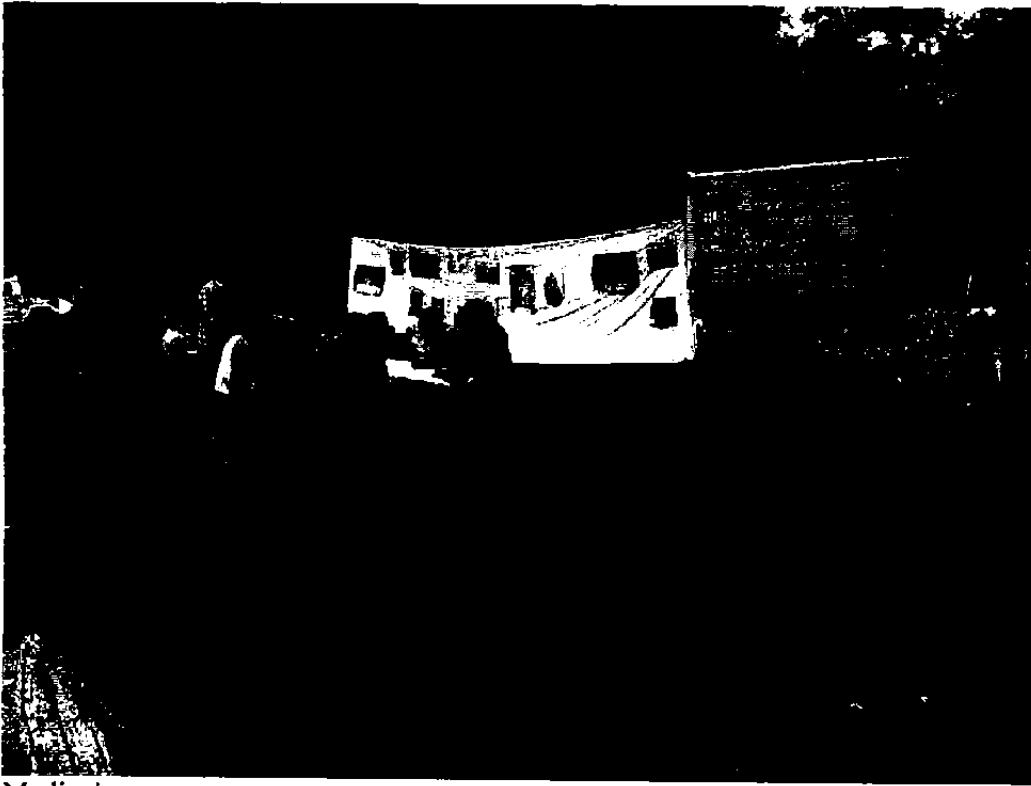
The collapsed first bridge at Iruttukuthi



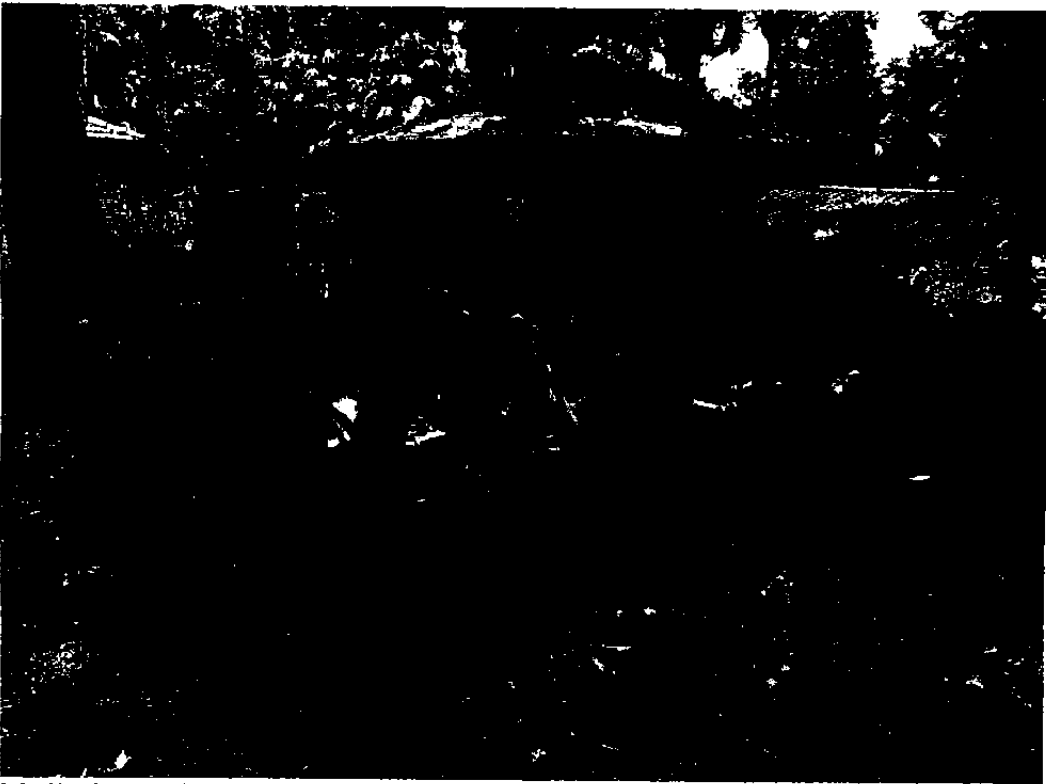
The second bridge under construction



Crossing the second bridge



Medical camp



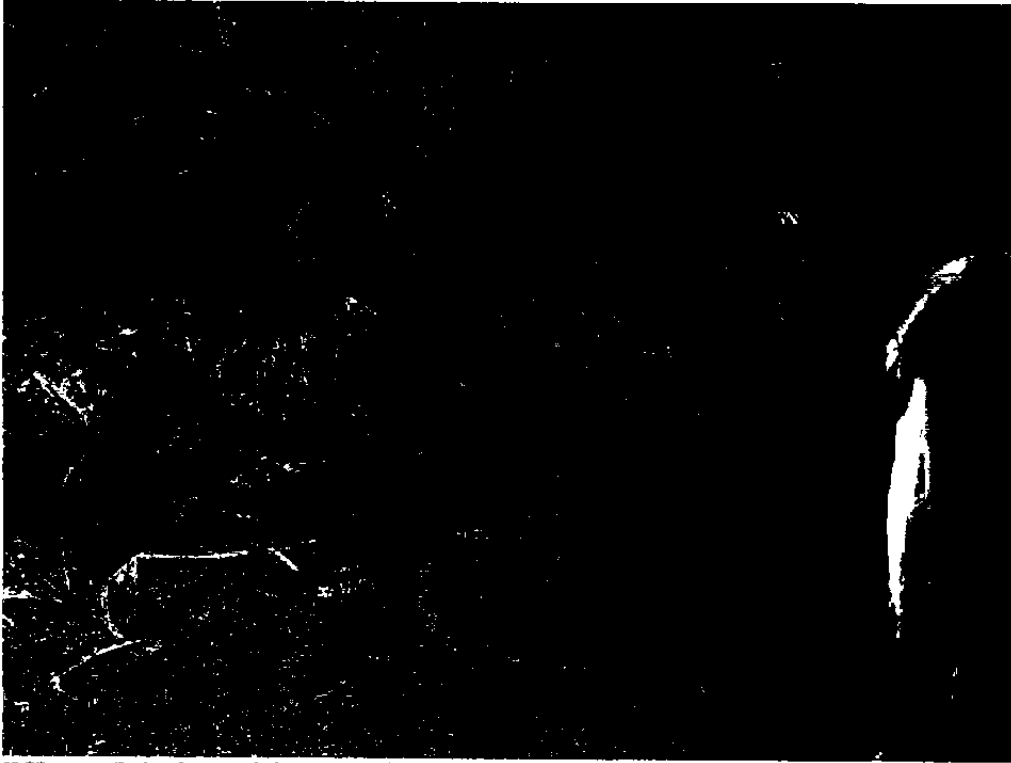
Medical camp in progress



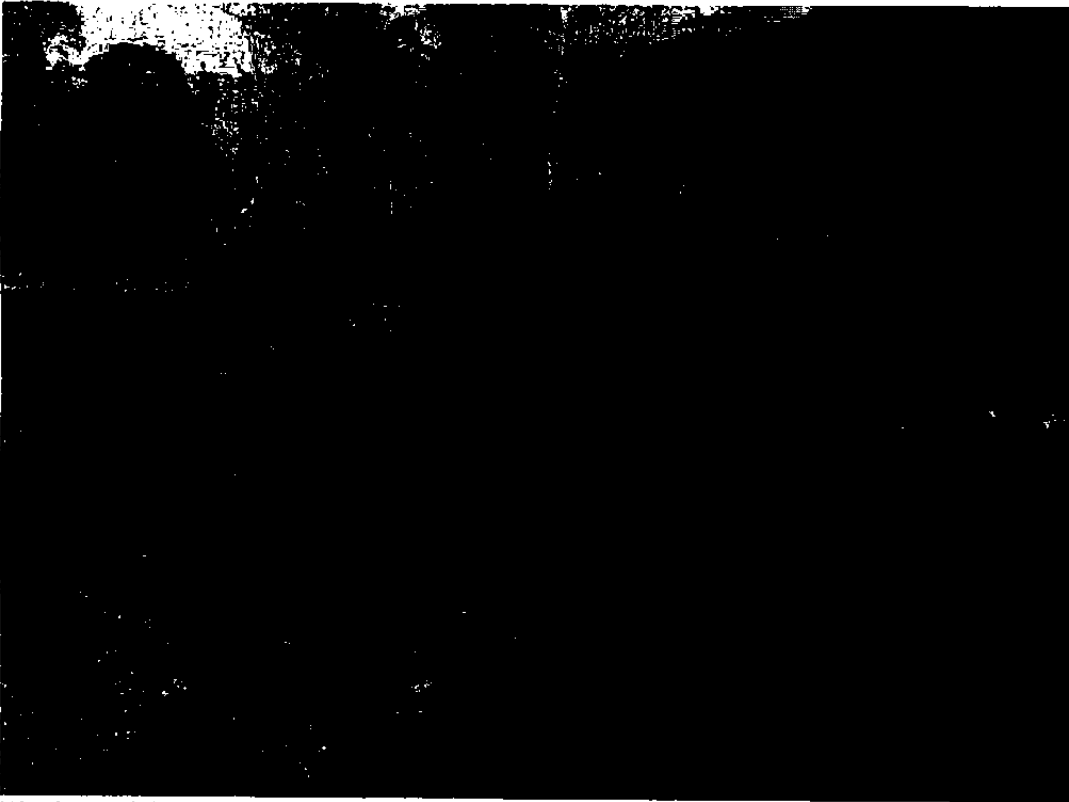
Children with buffalo calves supplied by ITDP



Goats supplied by ITDP



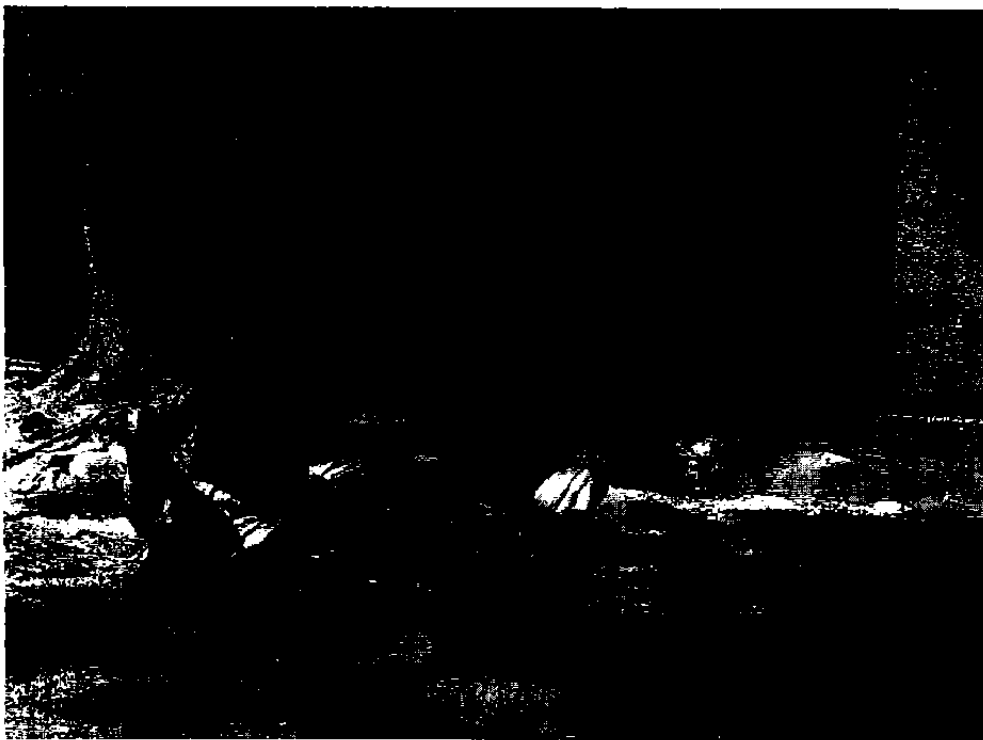
Effects of elephant visit at Kumbalappara



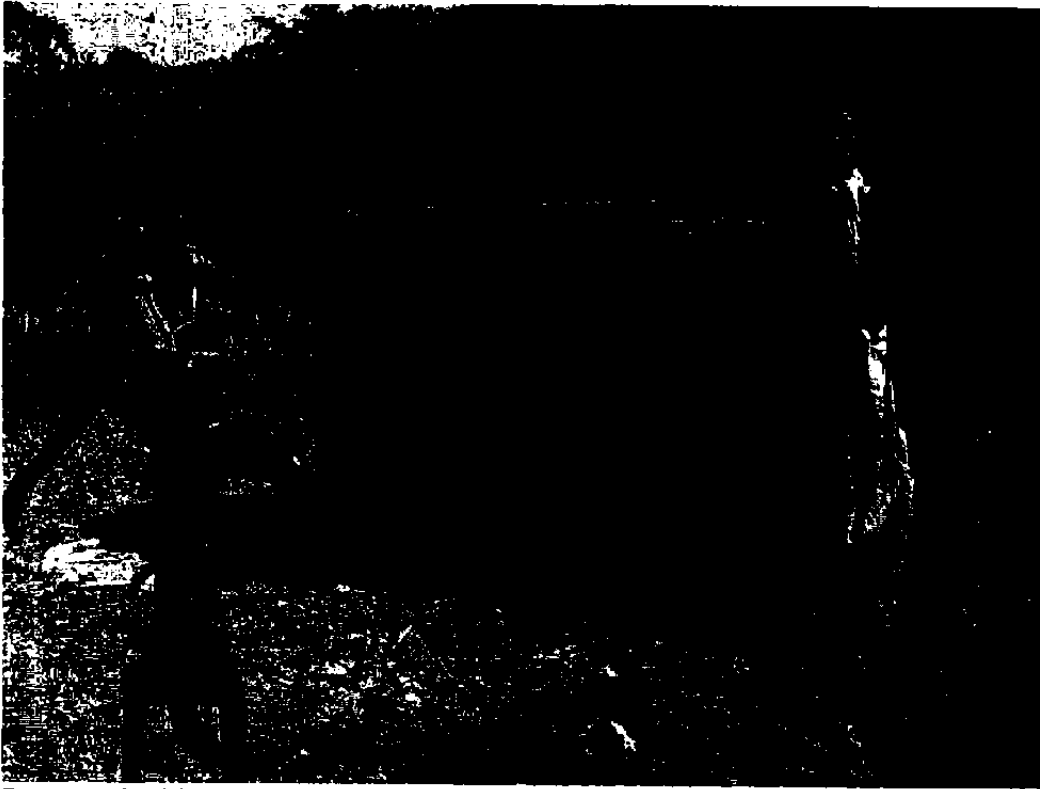
Elephant visit and after



Refuge from elephants at Kumbalppara river side



Bomman Moopan of Kumbalappara



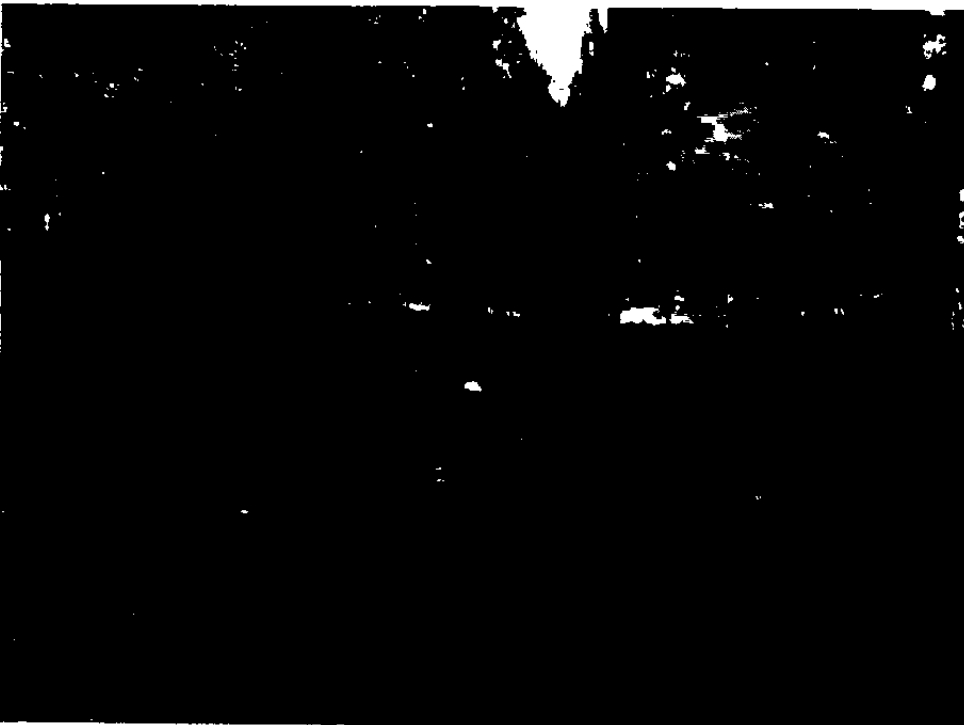
Bomman beside dysfunctional hand pump



Dry stream near PCK plantation



Entrance to the power fence guarded PCK Rubber Plantation damaged by Elephants



Work under Mahatma Gandhi National Rural Employment Guarantee Scheme



The youth



Despair ?