

IPP519

# TRIBAL DEVELOPMENT PLAN FOR JALANIDHI-II

## **TRIBAL DEVELOPMENT PLAN FOR JALANIDHI -2**

### **Introduction**

The problem of tribal development has reached a critical stage and has assumed an added significance in the context of high priority accorded to social justice in a new planning effort. The Indian constitution enjoins on the state the responsibility to promote, with special care, the education and economic interests of scheduled tribes and protect them from social injustice and all forms of exploitation. Their development is a special responsibility of the state. The successive plans have been laying considerable emphasis on special development programmes for the tribals. The physical development of an area itself will not be sufficient. It must go hand in hand with the development of the people of the region. No section of any community should be allowed to expose to the exploitation and benefits of the development must diffuse as widely as possible.

### **Background**

Jalanidhi phase 1 covered 8664 tribal households in 33 Grama panchayaths, during the first phase of Jalanidhi KRWSA adopted separate Tribal development plan in 10 Grama panchayaths namely Agali, Pudur, Sholayur, Muthalamada, Pothukal, Athirappally, Perumatty, Kulathupuzha and Thirunelly and Chaliyar. It is evident that the coverage of tribal population is much higher than in TDP comparing to general water supply and sanitation project. The tribal, who hitherto had received free service, have accepted the change in thinking and contributed Rs.83.6 lakhs in cash and labor to the beneficiary share. All the taken up schemes in TDP (162) were commissioned in and they cater to the water demands of 35000 tribal populace. 2587 new latrine were constructed so far for the ST beneficiaries and 10721 peoples were trained on SHP and 498 people on various skill development activities. The experience of Jalanidhi phase 1 reveals that a special attention is needed to address water supply and sanitation issues in tribal settlement areas.

### **Scheduled Tribes**

The tribal people of India are called "Scheduled Tribes" in the Indian Constitution. The designation, invented by the British, covers somewhat arbitrarily 255 ethnic communities which are economically and socially least advanced and is the earliest inhabitants of India. The English called them aborigines.

Most Indians consider the tribal communities, which live in isolated and self-contained communities as wholly distinct from them culturally and ethnically. They are right and wrong at the same time: culturally, Scheduled Tribes and Castes are distinct from the plainspeople; ethnically, they are not. Mostly, these aboriginal tribes and castes are less Aryan or totally non-Aryan, for they are predominantly Munda and Dravidian.

### **Tribes in Kerala – A profile**

Most of the tribes of Kerala state belong to the famous family group of Dravidians; they have got similar traits and body stature. In fact these tribes of Kerala have got dark complexion and quite short in height. They are also well built with flat nose. These tribes of Kerala grow their hair long and tie it in hair locks.

The mountainous parts of Kerala are inhabited by tribes namely Urali tribe, Paniyan tribe, Kapu tribe, Kanikkar tribe, Kadar tribe etc. They are reckoned as the descendants of the Negrito race

Cultural exuberances of these tribes of Kerala are rightly being highlighted in diverse aspects. House building, rituals, norms bore resemblance to the tradition and ethnicity of the tribal culture. Maximum of these tribes of Kerala build their settlements in the dense forest grounds and also on the top of the mountains. The houses of these tribes of Kerala are closely built so that these tribes of Kerala can depend on each other and thus maintain cordial relations. Due to the rugged topography of the region, these tribes of Kerala remain undisturbed by any kind of invasion from the foreigners, especially the Aryans. This is one of the factors why these tribes of Kerala have maintained the originality intact. Influences of the modern day times hardly have brought about any changes in their life styles and in socio-economic scenario of their tribal society

As per the observations of the anthropologists of the Indian subcontinent, these tribes of Kerala have developed ardent faith on religion and spiritualism. They live in groups and depended mostly on nature for all their needs. Almost all the tribes of Kerala follow religion, which is centered round Animism etc. They appeased devils for sickness and calamities. Besides there is a plethora of local gods and goddesses, whom majority of these tribes of Kerala revere and show immense respect and veneration. Worship of Amman or goddess Kali and Ayyan or Ayyappan was quite common. Moreover, there are few tribes of Kerala amongst whom ancestral worship is prevalent. Festivals and fairs are part and parcel of the culture and tradition of these tribes of Kerala. Especially during the festive seasons, the whole population of the tribes of Kerala get enthralled by the music, dance and get engross with the mood of frenzy and jubilation

One of the tribes of Kerala is Eravallan which speaks in a beautiful language of Irula, and belongs to the famous Dravidian language family. Another tribe, Paniyan tribe resides in some parts of Wayanad, Kannur and Malappuram. The word 'Paniyan', signifies 'worker'. There are various occupations that are practiced by this tribal community including Podu or shifting cultivation which this tribal people have adapted to over the years. In the entire social perspective of this Paniyan tribe, marriage has been feted with loads of excitement mostly in the presence of the village priest, who is popularly known as Chemmi. Kadar Tribe of Kerala has a rich heritage of adapting the profession of food collection and some of them are the practitioners of art and culture

In Kerala, the Ulladan tribes reside in every corner of districts namely, Idukki, Kottayam, Pattanamthitta and Quilon. Another tribal community named Malasar Tribe are oriented towards religion is rightly being emphasized by its various gods and goddesses of local origin, namely, "Mallung, Kali and Mariamman". Some other tribal communities of Kerala include the names of Mannan, Urali, Kammara, Kapu, Kondareddis, Kurumba, Malamalasar, etc

Festivals, dance and music are the integral part of the life style of these Mannan tribes. Mannan tribes believe on a plethora of hill gods and goddesses. Most of this Mannan earns

their livelihood by gathering sandalwood and rose woods from forests. In order to show better administration and control, these Manna tribes have chosen two representatives, namely, Thalaivar and Kani

In addition to these tribal communities there are some tribal groups that form the tribal society of Kerala. Among them the name of Urali tribal community can be stressed. Just to evade the hassles of heavy taxation and also the possible plundering of the soldiers of Tipu Sultan, this Urali tribe had taken shelter in the core of the dense forests in Kerala. Moreover, hundreds of Kammara tribes can be located in districts of Kerala and also its culture and tradition being rightly exuberated by the style of their ornaments and apparels. Moreover, in Karala , the whole community of Kapu tribes can be segregated in to several gothrams , namely, Janakula, Mahipala, Paidipaala, Raghukula, Kasyapa, Dhanunjaya. Another tribe namely, the Kondareddis tribe is one of the very old tribal communities who exist in Kerala and the Kurumba tribe is known for their art of sorcery as well as several practices of Hinduism

Apart from these tribal communities, various other tribes are scattered in the land of Kerala. The name of Malamalar tribal community has got a place in the 'Encyclopaedia of Indian Tribes (1989)' for their enriched culture and tradition. Marathi tribe is one of the primitive tribes of Kerala with a population of about 22,196. Some other tribes of Kerala are Koraga, Kota, Kudiya, Melakudi, Kurichchan, Kurumans, Maha Malasar, Malai Arayan, Malai Pandaram, Malakkuravan etc

### **Demographic distribution of Tribes in Kerala.**

According to 2001 Census, the Scheduled Tribe (ST) population of Kerala state is 364,189, which is just 1.14% of the total population of the state. The decadal growth rate of ST population during 1991-2001 at 13.5% was 4.1% higher than the growth of the total population. Kerala has a total of 36 scheduled tribes enumerated by Census 2001. Kerala's ST population is overwhelmingly rural. Wayanad district has the highest ST population (17.4%) followed by Idukki (14%).Alappuzha has the lowest population of STs (0.1%), preceded by Thrissur, Kollam, and Kozhikkode (0.2% each). Out of the thirty five scheduled tribes notified for the state, Paniyan is the most populoustribe forming 22.5% of the total ST population of the state. The Paniyan population in Kerala is 81,940. Next in size is Kurichya community with a total population of 32,746 forming 9% of the total ST population. In terms of size, the six other tribes fall in the range of 21,000 to 32,000 and they along with Paniyan and Kurichya form 73.6% of the total tribal population. These six tribes are the following.

- Muthuvan,
- Kanikaran, seen in Thiruvananthapuram district,
- Irular,
- Kuruman,
- Malayarayan

There are seven tribes including Malayan, Malai Vedan, and Mannan having 5,000 – 16,000 population. They account for 20% of the state's ST population. The remaining 20 tribes along with the generic tribes constitute the residual 6.4% of the state's tribal population. There are eleven tribes with less than 500 population. Among them Kota, Kammara, Kochu Velan, and Konda Kapus are the smallest groups each with less than 50 population.

At the district level, Paniyan have the highest percentage in the total ST population in Malappuram (56.3%), and Kannur (54.9%). Kurichyans have their highest percentage in Kannur (40.2%). Among the other larger tribes, Kanikaran are primarily concentrated in Thiruvananthapuram district (90.3%), and Malayarayan in Kottayam district (61.9%). The overall sex ratio of the ST population at 1021 shows preponderance of females, and even though significantly lower than the state's average sex ratio, is higher than that of the national average (978) for the total ST population as per census 2001. All the major tribes of the state except Muthuvan (covered in Marayur) have sex ratio higher than the national average. Females outnumber males in the total population of Kanikaran, Paniyan, Malayarayan, and Marati. However, the sex ratio among the tribal children in the age group of 0-6 years (974) is approximately the same as that of all ST's at the national level. Marati tribe has registered the highest sex ratio of 1054 followed by Kanikaran (980). The other major tribes have sex ratio below the national average.

The overall literacy rate of the scheduled tribes has increased from 57.2% at 1991 census to 64.4% at 2001 census. It is higher than the national average of 47% of all STs. Male literacy has increased from 63.4% to 73.8% while female literacy has gone up from 51% to 58.1% during 1991-2001. Among the numerically larger tribes, Malayarayan have the highest percentage of literates (94.5%), followed by Kanikaran, Kurichyan, Kuruman, Marati etc., (71.4%). Marati, Kuruman, Kurichyan, Kanuikaran, and Malayarayan have shown higher literacy rate ranging from 60 – 93% whereas Muthuvan, Paniyan, and Irular have shown lower female literacy rate in the range of 31 – 43%. So far as the levels of education are concerned, as many as 33.5% of the tribal literates are either without any educational level or have attained education below primary level. The proportion of literates who have attained education up to primary level and middle levels are 29.3% and 22.9% respectively. Persons educated up to matric/ secondary/ higher secondary etc. have a share of only 12.4% in the total literate population. Graduates and above are 1.2% while diploma holders constitute a mere 0.8% only. Paniyan community has 80% of the literates educated up to primary level whereas Kurichyan, the second largest tribe has 60% primary level literates and 9.9% secondary level literates. Among the larger tribes, Malayarayan has the highest population of matriculates at 24.4%.

The state has a tribal population of 0.36 million, accounting for 1.1% of the total population. Total number of tribal settlements in the state is about 4,000. Of this, 671 are forest settlements. They are spread, rather unevenly, across 14 districts. It is the highest in Waynad (about 0.13 million) amounting to 37.36% of the total tribal population in the state and 17.43% of the district population. In comparison, there are as many as 10 districts with a tribal population accounting for less than 1% of the district population. There are 35 scheduled tribal groups in the state Among these numerically dominant ones are the Paniyans, Maratis, Malayarayar, Kurumans, Kurichiyans, and Irulas. The numerical strength of each remaining tribes is more or less 1,000. The Adiya, Cholanaickans, Kattunaickans, Kurumbas, Kadars and Koragas (constituting about 4.8% of the tribal population) are categorized as primitive groups.

Tribals are distinctly different from the others as characterized by isolated habitation, high incidence of poverty, illiteracy, and low health status. As against a literacy rate of 89% for the non-tribal population, it is 49% among the tribals. Sex ratio is reported to be declining reflecting poorer nutrition and lack of health care among the women. Seventy three percent of the tribals eke out their living from agriculture. While cultivators are only 17%, the remaining 56% are laborers. Tribals living inside the forests (there are 671 forest settlements) are engaged in gathering non-timber forest products and forest protection

works. Half the numbers of tribals are reported to be 'below poverty line'. By GOK's own admittance, "even after five decades of development efforts, ST's continue to constitute relatively the most backward and vulnerable sections of the population in the state with extremely weak economic base".

District wise ST population is given in attachment.-1

### Why a Separate Tribal Development Plan

Since tribal people are at different social political, economic and ecological levels their problems also differ in degree. The following are the major key issues common to all tribes in Kerala.

- Illiteracy
- Poor health, hygiene & sanitation
- Poverty/ inability to contribute BG share
- Introvert attitude
- Incidence of water born diseases
- Poor water quality
- Non availability of water

To address the above issues in effective manner particularly those predominant in WATSAN sector a separate time bounded tribal strategy is needed

### Tribes covered under Jalanidhi phase 1

There are about 8664 tribal households spread across the project districts accounting for 4.5% of the total covered households. The details of Tribal coverage across the Grama panchayath under Jalanidhi phase 1 is given below.

SI No	Name of Gram Panchayath	Name of district	Coverage	
			Household	Population
1	Pananchary	Thrissur	5	28
2	Athirapally	Thrissur	412	2266
3	Agaly	Palakkad	1409	7750
4	Ayilu	Palakkad	4	22
5	Pudur	Palakkad	812	4466
6	Sholayur	Palakkad	1560	8580
7	Muthalamada	Palakkad	996	5478
8	Pattanchery	Palakkad	5	28
9	Kollangode	Palakkad	59	325
10	Perumatty	Palakkad	12	66
11	Nalleppilly	Palakkad	10	55
12	Vazhikadavu	Malappuram	17	94
13	Pothukal	Malappuram	140	770

14	Chaliyar	Malappuram	185	1018
15	Edakkara	Malappuram	3	17
16	Moothedam	Malappuram	3	17
17	Edavanna	Malapuram	1	6
18	Koodaranji	Kozhikkode	11	61
19	Kayakody	Kozhikode	3	17
20	Kavilumpara	Kozhikode	3	17
21	Koduvally	Kozhikode	16	88
22	Karassery	Panangad	5	28
23	Vellarada	Thiruvananthapuram	7	39
24	Kulathupuzha	Kollam	89	490
25	Konni	Pathanamthitta	2	11
26	Kadanad	Kottayam	11	61
27	Kaduthuruthi	Kottayam	2	11
28	Vellathooval	Idukki	67	369
29	Mariyapuram	Idukki	10	55
30	Nenmeni	Wayanad	693	3812
31	Thirunelli	Wayanad	1496	8228
32	Ulikkal	Kannur	224	1232
33	Kodombelur	Kasargode	390	2145
		<b>Total</b>	<b>8664</b>	47641

### Lessons Learnt from Jananidhi- I

Availability of water at home in the rural and tribal hamlets and households has brought about positive changes in the life of the tribal communities, especially that of women and children. Personal hygiene has improved among the tribes as a result of getting water at home. More time is available now for the women to take care of their families as well as to earn a living through work. Time saving has been reported across BGs as a result of availability of water at the courtyard through the Jananidhi scheme. Members of the BG used to draw their daily requirement of water from streams, spring wells by the paddy fields or from temporary dugout holes on the stream bed during summer months. Some of these water holes used to be as far away as two to three kilometers.

As a result of Jananidhi scheme, people are mostly relieved of the drudgery involved in fetching water home by head load. Women are particularly pleased with the new arrangement of water supply at the court yard. When they return from work, they find the availability of water at home a great relief. Payment is proper in small tribal schemes. The benefits of availing water clearly outweigh the burden of making payment.

Scheme performance is directly related to the quality of leadership in the BG rather than institutional systems. Therefore, where ever there is a problem in leadership, systems are failing. The Grama panchayats and their members do not have any involvement in the running of the community led water supply schemes. However, there have also been

instances when the members and also the grama panchayats as institutions took up responsibility and provided leadership in times of crisis.

In spite of the special TDP package, schemes have not been able to create empowerment of tribal people to any significant extent. In most cases, they continue to be tentative, uncertain beneficiaries. In schemes benefiting both tribes and others, the leadership is invariably of the non-tribes. In large multi BG schemes, it is the tribal schemes that remain a matter of concern. Real leadership and initiative is seen in very few instances in the case of small tribal schemes.

Tribal BG leadership nowhere has reached a stage where they can analyse the causes of problems in their schemes and build on that knowledge for better management in future. The tendency is to live with problems whatsoever, rather than objectively analysing and trying to resolve them. The case of Jaladhara-Shanamangalam is an example. Their consumption of electricity was 6.15 units on an average per day, while after the motor had been repaired through rewinding; it has shot up to 11.25 units per day, with lesser output of water pumped. The group is still living with it and has not enquired deep into the causes and consequences.

Inadequacies in book keeping and documentation in most places have led to lack of transparency; in some cases it has further worsened into corruption and crisis, as seen in Vechapathi in Sholayur. The leadership of AKM project in Sholayur felt that BGs were unworkable as institutional form and wanted to dispense them off. Lack of regular meetings has added to the fall in transparency in several places in both Tirunelli and Sholayur. Maintaining proper records is considered a burden and BGs realize its importance only when they land in trouble.

Small water supply schemes alone seem to be suitable to the Tribal psyche. The tribes find large water supply schemes difficult to comprehend and appreciate technically, socially and institutionally. The social organisation, especially the traditional and other leadership is very critical to make a water supply scheme successful. Therefore, leadership development should also run parallel to scheme building.

The motivation level of the BG leadership and members also depend on their memories of the extent of hardship that they had faced in the past due to water scarcity. In some places, availability of an alternative source for instance, has led to the scheme being neglected by the people.

The tribes are also exposed to the political party culture characteristic of the state. In most of the local bodies covered by the study, narrow political affiliations seem to have replaced effective politicisation of people. With the weakening self governance systems and increasing integration with the mainstream political activities, tribes also seem to be treading the similar paths. Narrow party interests are being manifested in tribal BGs too. Technical failures leading to social and institutional failures are seen in several places. General communities in general are better equipped to resolve problems without them developing into crisis situations. Tribes have to go a long way in this regard. In mixed schemes it is the general community leadership that rise to the occasion to resolve crises.

Negative externalities can also hamper sustainability of the water supply project. One such issue is rampant alcoholism in tribal settlements. It is impossible to call meetings of



BGs and take up issues concerning the project in tribal hamlets in the evening, where ever the incidence of alcoholism is high.

## **Tribal Development Plan**

### **Objectives**

Tribals when compared with non –tribal counterparts are relatively unable in terms of the technical, financial and institutional capability, in short, 'capital'. The differential in capital warrants that tribals need to be treated differently compared to the non-tribals. Adopting a common approach, both to tribals and non-tribals, is likely to result in tribals being excluded from project participation. Hence, it is essential that the project draws an approach/methodology, distinctly different from that developed for the non-tribals. This in view, as per the Operational Directive (OD), tribal development plan is designed, to address issues related to the project rules, scheme cycle and associated institutional arrangements.

### **Development Framework**

#### **Tribal Sub Plan**

The Government of Kerala, as part of All India strategy for tribal development since Fifth Five Year Plan, has been implementing a two pronged strategy: protective and promotional. The former is chiefly aimed at safeguarding the tribal land interests and prevention of atrocities and exploitation. Simultaneously, efforts are made to promote their socio-economic development. This development strategy is called Tribal Sub-Plan strategy (TSP). As a part of this, an Integrated Tribal Development Project (ITDP) has been launched in 7 areas. This arrangement has enabled covering 75% of the tribal population. Priority subjects being financed under TSP include: education, housing, health, forest dwellers' problems, revitalization of tribal cooperatives, power connection, water supply, and revitalization of loss making projects, improvement of data base pertaining to tribals. Till recently, all the funds used to be handled by the SC/ST department. Now, after the decentralization (1997), two thirds of the earmarked funds are kept at the disposal of the local bodies (Gram and Block Panchayaths). The remaining one-third is administered by the SC/ST department. The state's financial allocation for TSP is about Rs 60 million per annum. Though this is quite adequate, the programs launched, especially by the GP and BGs, have been a subject of criticism. Many of them are reported to have benefited more non-tribals than the tribals. In any case, water supply and sanitation have received very low attention.

#### **Social Activists**

Government of Kerala has introduced an innovative concept of developing a cadre of educated tribal youth as Social Activists. These activists are expected to: (i) act as an effective link between the tribal communities and Panchayaths/ sectoral departments; and (ii) help in chanelizing the resources under the development schemes to the tribals and also to. Activists are deployed in every tribal dominated GP and are positioned in the ITDP office. This concept has enabled in reaching and working with the tribals more effectively.

### **OECD/JBIC financed project (AHADS)**

The Attappady Wasteland Comprehensive Environmental Conservation Project (AWCECOP), in short, the Attappady Eco-restoration Project, is a Rs. 219.321 crore (JY 6338 million) sustainable development project, funded by the Japan Bank for International Cooperation (JBIC) and carried out with the objective of restoring the ecosystem as well as the livelihood security of the people of Attappady, both of which had undergone severe degradation over the years due to various reasons.

Being designed on a watershed basis, this covers both the tribal and non-tribal areas. The components include: soil, water and biomass management; water resource development for irrigation; and income generating schemes. This project is being implemented by Attappady Hills Area Development Society, an autonomous body set up by the Government of Kerala.

### **Kerala Institute for Research, Training and Development Studies (KIRTADS)**

The institute has been set up by the government to conduct research, training and development studies. The research unit conducts anthropological studies on the caste status of claimants' including that of the cases referred to by the SC/ST development department, Commissioner of Entrance Examinations, Backward Classes Commission. It imparts training to elected SC/ST representatives. The development studies relate mostly to evaluating development interventions.

### **Legal Framework**

Within the framework of the provisions of the Constitution of India (Part X, Fifth Schedule), the Government of Kerala has enacted a number of laws to protect the rights of the ST. The key protective laws are as follows:

#### **The (Kerala) Scheduled Tribes (Restriction of Transfer of Lands and Restoration of Alienated Lands) Act 1999.**

Land forms the principal means of livelihood for Tribals. The development of tribals, therefore is linked with the development of their land. Many non-tribal immigrants, however, have fraudulently alienated large areas of tribals taking advantage of ignorance of the latter. Alienation of land has been a serious problem faced by the tribals in Kerala. The Department of Revenue, GOK, reports that 80,590 Ha of tribal lands have been alienated (up to end 1996). Out of these, only 440 Ha have been restored. The state is fully abreast with this problem and has taken a number of measures to check land alienation. In 1975, the Kerala Scheduled Tribes (Restriction of Transfer of Lands and Restoration of Alienated Lands) Act was passed by the legislative assembly to restrict transfer of land by members of the ST to non-tribals, and for restoration of lands alienated by such members. However, this could not be enforced till 1982. This Act was amended in 1996, through which, non-tribals who would have acquired lands prior to 1986, up to one hectare will remain undisturbed;

and those with more than one hectare had to pay a suitable compensation. The President of India, however, rejected this amendment. Consequent to this, the state formulated a new Act, Kerala Scheduled Tribes (Restriction of Transfer of Lands and Restoration of Alienated Lands) Act 1999 (Act 12 of 1999) which provides for an invalidation of all land transfer transactions (from STs to non-tribals) made during 1960 through 1986. If the land transfer is less than 2 Ha, the concerned tribal is entitled to get an equal extent of land from the government. The act also a provision which makes the state bound to provide a minimum of one acre of land to the landless tribal in the same district within a period of two years (from March 1999). Further all tribals who possess less than an acre of land is eligible to receive an acre of land from the state. Welfare fund has also been envisaged under the Act for the rehabilitating tribals affected by land alienation. Priority will be given for the construction of houses to houseless tribals. The new act is expected to address fully issues related to tribals' land alienation.

### **Non-timber forest products (NTFP) collection and marketing**

Tribals living in and around the forests traditionally depend upon hunting and NTFP collection for their livelihood. Consequent to the nationalization of forests in 1974, hunting was banned and NTFP collection entrusted to private contractors who used to employ mostly non-tribals. This was changed in 1978 and the collection rights were assigned to a two-tier cooperative setup. While the Girjan Cooperative Societies (GCS) are the grassroots level tribal cooperative, they are federated into a state level SC/ST Cooperative Development Federation. There are 82 tribal cooperative societies and 35 of them, covering about 12% of the population, are engaged in NTFP collection. This arrangement has helped in eliminating the middlemen and securing the highest sale value for the tribals. As against the Government of India (Ministry of Social Justice and Empowerment) stipulation that tribals should receive at least 75% of the final sale value, the cooperative federation is providing for 80%. As a result of this arrangement, the sales turn over are reported to have increased 8 times over the 1990-91 figure of Rs half a million. The societies have been exempted from paying royalty or lease rent for a period of 10 years, up to 2002.

### ***Forest Policy***

It is estimated that 17,156 scheduled tribal families (23% of the total population) belonging to 671 settlements are living in the forests. The Forest Conservation Act of 1980 does limit the type of development activities that can be initiated within the forest. But, as all the settlements are inside a reserved forest or within a sanctuary (i.e., no settlement is inside a national park), while large civil structures may not be allowed, there will be no bar on activities such as small scale gravity flow or rain water harvesting, sanitation, literacy, self help group formation etc. Currently, too, several such forest-friendly development programs have been launched. The Department of Forests has constituted a Tribal Welfare Cell under the chairmanship of the respective Divisional Forest Officer (DFO). The other members include Revenue Development Officer, Tribal Development Officer, Tribal Panchayath Members and representatives from the benefiting forest settlements. The cell has the responsibility to prepare development interventions and arrange for financing through local bodies.

### ***Atrocities***

Atrocities against tribals are quite lower compared to other states in India. But, given the relatively higher awareness and stricter enforcement of the Prevention of Atrocities Act of

1989, more cases are registered. Besides legal aid and police protection, provision exists for compensation of payments. The number of cases, as per the police records, has risen marginally from 171 in 1992 to 175 in 1996. The disposals of the cases are rather tardy. Out of 190 cases registered, only 18 of them have been disposed so far. For speedy disposal of cases, a special bench is constituted in all district courts.

## **Baseline Information**

A summary of the baseline information generated from the tribal development study is presented below:

Majority of the tribals (78%) have a nuclear family structure. The extended and joint family structure is mostly due to inability to own an independent dwelling. Most families, irrespective of the tribal group, are Patrilineal. About 5% of the families are reported to be 'female headed'. Family size and sex ratio vary from tribe to tribe. While the family size range between 2.8 (Ulladan) and 4.3 (Muthuvar). Sex ratio also varies, but, in general, in contrast to the non-tribal groups, the men outnumber women. About half the populations (48%) are illiterate; and women outnumber men in literacy. In some groups such as Muthuvan and Kadar, over 60% of the male are illiterates. Similarly, female illiteracy, among Mannan, Muthuvan and Kadar groups, is over 70%. Isolated and distant inhabitations have meant poorer accessibility to educational institutions. Some of the remote settlements are as far as 16 Km away from the nearest school.

Thirty percent of the sample population (154) is illiterate, which is exceptionally high given the state's achievements in adult literacy. In all 33% of the population has reached educational level - below primary. Higher levels of educational achievement are still rare among the tribes of Kerala.

### ***Housing***

Nearly 90% of the families have houses, constructed under different government schemes. The proportion of Pucca houses, however, is less than 10%. Of the remaining, a third are Kutcha and the remaining two-third are Semi-Pucca houses. Ration cards, one of the means of an identity within the country, and an access to public food distribution, is possessed by 78% of the households. About 71% of the households do not have access to power connections: 25% are totally devoid of it and 46% are far away from the main line.

Seven per cent of the families have single room houses while 22% have two-room houses. In all 63% of the houses have two room or fewer. These rooms are, however, smaller than that of typical houses in Kerala. Thirty percent of the houses have four rooms.

### ***Occupation***

Many of the tribal people are forest-dwellers and food-gatherers. Increasingly, they are found living on the fringes of the forests near the highways and the villages of the plainspeople, yet apart from them. This frontier existence of the tribals is highly symbolic. They are caught between two worlds. Their forest home cannot support them any longer, for food in forests is getting scarce because of the state policy against deforestation.

There are fewer and fewer wild animals to hunt; there is also a legal ban on hunting. For rice and clothes they have to depend on the people of the plains who continue to exploit the

helplessness of the tribals. The few tribesmen who go to towns looking for jobs soon find it difficult to cope with the demands of civilization and return home to jungles to live on the edge of culture and nature.

Tribals also earn their livelihood by working as laborers in agricultural fields. Some of them are engaged in brick making units. Employment in almost all these occupations is seasonal. In the lean season, many tribals go to the forest and collect NTFPs.

Thirty per cent of the sample population is engaged in farm labour (Agricultural Labour according to census classification). This is lower than the state average of 47.1% and closer to the national average (36.4%). Farmers, meaning those with own land for cultivation, form a mere 7% of the sample households, which is only about one-seventh of the national average (47%). Around 19% of the people are engaged in non-farm wage labour.

Cattle rearing are not significant among the tribals covered by the survey; three-fourth of the households (92) do not keep any animal. Three families in Marayur and two families in Noolpuzha have four animals each, indicating that they are serious about the business. Three families in Noolpuzha and a family each in Marayur and Parathode have three animals each. One-third of the thirty families that keep animals among the respondents have just one animal each. None of the midland families keep animals.

Even though 36% of the families have APL ration card, it cannot be considered as an indication for economic advancement. Seven per cent of the families have single room houses while 22% have two-room houses. In all 63% of the houses have two room or fewer. These rooms are, however, smaller than that of typical houses in Kerala. Thirty percent of the houses have four rooms. While all the houses use firewood or organic residues for fuel, there are seven families using LPG and two using electricity for cooking. Of the families that use LPG, six are in Ranni Perunad and the remaining one is in Parathode. Two families that reported using electricity for cooking are from Ranni Perunad and Muzhakkunnu. Use of mobile phones is widespread among the tribal people with 86 families (70%) reporting at least one mobile phone at home. Of these 18 have two mobile connections each. Thirty six families do not use mobile phones.

### ***Land tenure***

A little over 40% of the households own no lands. Of the remaining, 13% possess up to half an acre; 9% up to an acre; and 33% between one and five acres of land. Most of the tribal households, characteristically, have some homestead lands. On the ownership of lands, 17% have clear title deeds; 55% are provided with a possession certificate; and the remaining 28% are without papers. All the households with no papers have applied for possession certificate and their applications are under process. During the discussions with the concerned agencies, it is assured that the same will be processed soon and that the state is bound to regularize all possessions.

### ***Water Supply***

Majority of the households depend upon natural sources such as rivers and streams for water followed by water holes and springs. While 20% depend upon public taps, wells cater to 10% of the households. Mostly women fetch water. In the normal circumstances, 40% traverse a distance up to 50 meters to fetch water; 18%, 50-100 meters; 12% 100-150 meters; and the remaining 27% beyond 150 meters. In respect of availability, while, 58% do receive water throughout the year, the remaining 42% express scarcity for 2-6 months in an year. Distance traveled to fetch drinking water during scarcity period increases substantially, as high as over 750 meters. The undulating terrain makes water fetching a

highly stressful job. Time spent on fetching water during scarcity period varies between 2 hours and 6 hours per family per day. On the quality of water fetched, 25% express as 'good'; 50% as 'satisfactory'; and the remaining 25% as 'bad'.

Only 14% of the sample households (17 houses) have own sources within their premises, of which 13 are open wells. All the wells owned by the sample households are functional. Eighty-three per cent of the households depend totally on external sources throughout the year.

Of the 94 sample TDP households (Marayur and Noolpuzha), there is only one house with a source within the premises, which is in Marayur. The source is a gravity flow water collection system using a spring on the upper side of the hill. Three houses in Ranni Perunad have own wells. Household well as a common feature is seen only in the midland panchayath of Manikkal.

Buying water is rare among the tribal communities across the study areas. Only four families in Ranni Perunad and one family in Parathode reported having spent money on water for domestic use. Malayaraya families in Ranni Perunad had reported spending money in bringing water from Pamba using public transport. Tribal families in general tend to put in more physical efforts in collecting water or moving to the source rather than spending money on water.

Tribal families in general face water scarcity in some form or the other. Among the sample households, 75% reported inadequate water supply during summer and 53% during rains. This means that half the tribal population covered by the study lack access to adequate water throughout the year. Ninety per cent of the sample families in Marayur and 58% in Noolpuzha have water scarcity in summer while 67% in Marayur and a third of the sample families in Noolpuzha face water scarcity in rains as well.

Inadequacies in water quantity are widespread among the tribal families in midland also. Almost all the families covered reported inadequacy in available water quantity during summer. In Muzhakkunnu, the sample families are exposed to water shortage throughout the year.

Quality issues are also prevalent, and are more in rains when 70% of the families face problems with water quality. The corresponding percentage for summer is 38. Water quality issues are rampant in the TDP panchayats of Marayur and Noolpuzha during rains where 98% and 83% of the sample families respectively reported water quality issues associated with rainy season. The water quality issues are a combination of dirt and chemical pollution as rains sweep away the remnants of chemical fertilizer and pesticides in the soil in the plantation which get mixed with drinking water.

More than half the sample families depend on rivers, streams and springs throughout the year in Marayur for collecting and bringing water for domestic use. This trend was found to be low in Noolpuazha where more people move toward the source rather than fetch water home. Dependence on such sources is low in midland where people mostly collect water from wells outside own premises.

Half the sample population depends on wells as their main source for collecting water during summer. Rivers, streams and springs are the next (22%). Keni, a shallow well dug in the

valley, is a popular source in Noolpuzha, used by 27% of the sample families there. Keni is also seen in Muzhakkunnu.

Almost half the sample families have wells as their main source during rains as well. Here again, rivers, springs, and steams form important sources with 23% of the families – Mostly in Marayur, followed by Ranni Perunad - depend on them. Public taps are also important water sources with around 15% of the families depending on them throughout the year. Marayur, Parathode, and Ranni Perunad have families covering distances running into a few kilometres to fetch water home in summer. There are nine such families in Marayur, three in Parathode and a couple of them in Ranni Perunad. Dependence on rivers, streams, and springs could be one reason behind the number of families covering such large distances in these local bodies.

In all 21 families in summer and 14 families in rains travel more than half a kilometre to fetch water. There is a slight increase in the number of families that do not have to travel significant distances from summer (17) to rains (22). However, the overall distances covered do not significantly vary between summer and rains. Highest number of families (37) – 14 in Marayur and 18 in Noolpuzha, a couple of families in Ranni Perunad, and one family each in the other local bodies covered – have to cover a distance up to 50 metres to fetch water. While 28 families across the study area (23%) have to use steep pathway to fetch water, 40 (33%) use pathways of moderate slope. Only 26% of the families carry water over relatively flat terrain. All the ten families in Ranni Perunad, four out of the five families in Muzhakkunnu, and three out of the four families in Parathode have to traverse steep pathways to fetch water. In Marayur 58% of the households have to negotiate steep pathways or pathways of moderate slope to bring water, the corresponding percentage for Noolpuzha is 45%.

No significant difference was noted between the nature of the pathway for fetching water in summer and in winter, except in Ranni Perunad in midland, where three families move into the moderate slope pathway category and one uses flat pathway. Differences of similar nature were also seen in midland panchayaths. However, in the two TDP panchayaths of Noolpuzha and Marayur, seasonal variations did not make any difference to the nature of the pathway used. Around 60% of the sources used were reported perennial. Most of the sources used during rains are perennial. Highest percentage of households reported dependence on perennial sources during summer in Ranni Perunad.

Onus of water collection is mostly on women and only 24 households reported women not spending time in fetching water while in 93 households men stay away from this job. There are 34 women as against 11 men among those spending up to an hour. In the category spending between a couple of hours to four hours, there are six times more women than men.

It is mostly women who spend more than four hours on fetching water too. Across study panchayaths, women are involved more than men in collecting and bringing water for domestic use. During field visits, the study team found only women carrying water across locations. Fourteen households across study locations reported girls spending up to an hour in fetching water. Nine families reported girls spending between two and four hours, while three families each reported girls spending between one and two hours and above four hours. Boys are in general not engaged in fetching water, with a few exceptions. Only two families each in Perunad and Muzhakkunnu reported boys fetching water. In short, it is the

women and the girls who are engaged in collecting and fetching water. Rivers and springs are the most popular among the sources that people move towards for meeting their water needs.

Among the purposes for which people move to these sources, bathing and washing clothes is the most common combination. People also go to the sources for washing clothes alone. Of the 82 households that reported moving to the sources, close to 90% (73 households) do it for both bathing and washing clothes. Survey households in Noolpuzha have the sources closest to their location. Three-fourth of the families have sources within a distance of 200 metres. This also explains the reason why fetching water home from distant sources is not popular in Noolpuzha. In other places, people cover varying distances to reach the sources. While 25 families have to walk between 300 and 500 metres, nine families have to cover more than a kilometre. While 58% of the families in Marayur take a steep pathway or one of moderate slope to reach the source, 45% in Noolpuzha has to do the same. An equal percentage of families in Noolpuzha (24) can reach a source by a flat route. In Perunad, all the respondent households have to tread steep pathways to reach the sources.

Thirteen families in Marayur have reported spending four hours and above for bathing and washing clothes at the source per day. So did half the respondent families in Ranni Perunad. In Noolpuzha, 35 out of the 41 families that move to the source spend anywhere between one to four hours. Across the study areas, one-fourth of the households spend that go to the source spend more than four hours a day.

Water handling practices at the households leave much to be desired. Water storage was found to be improper in 63 households (52%) while problems were found with the way water is handled at 72 households (59%). While half the respondent families reported drinking boiled water, a third among them still mixed boiled water with ordinary water before drinking.

More than 80% of the households expressed willingness to pay if they are provided with household water connections with assured water supply throughout the year.

### ***Hygiene and sanitation***

In general, personal, household and community hygiene are all poor. Household sanitation practices are negligible. The study reveals that 88% defecate in open space. Some of them do have a latrine, but, many are not put to use. Interestingly, majority of the tribals are fully aware of the consequences of the unhygienic practices. They do attribute this as the cause of majority of the diseases. But, lack of requisite availability of water is put forward as the major reason for the unhygienic status. Most common diseases tribals suffer are: jaundice, typhoid, diarrhea, anemia, tuberculosis, fever, cough, worms and alcohol and Ganja addiction resultant nervous disorders.

Twenty eight per cent of the families do not have latrines, all belong to highland. All the midland families have latrines. While in highland, even having the latrine in many cases do not mean they are used; latrine use is common in midland. There are two families each in highland and midland that have two toilets each. These families are regular users of the toilets. Deep pit and single pit latrines are the most prevalent in the study areas.



Forest is the most preferred location for open defecation for both men and women in tribal areas and understandably so. Thirty four of the thirty six households that reported open defecation use forest, and the remaining use nearby bushes.

Only about 30% of the respondent households reported washing hands with soap after defecation. Most of the cases even within this category were not supported by apparent evidences where ever it could be checked. Problems have been reported in handling child faeces also. Very few families dispose it of in the toilet. Throwing the faeces outside is the most common method. In some of such cases, it is meant to be eaten by dogs.

Burning, throwing away, and disposing within the yards were found to be the most common ways of handling solid waste in the sample households. There are very few families that cared for proper disposal of solid waste.

After lowland, tribal areas in highland were found to be the most affected by water-borne diseases among study locations. Forty nine families (40%) reported incidence of water borne diseases over the last one year, of which 47 were in highland. Diarrhoea has been the single diseases with the highest incidence level. Various types of fevers have also been reported. Typhoid and jaundice also were found to be common among the tribals. Repeated occurrence of water borne diseases was also reported from the respondent families. Of the 47 affected families, 13 reported two incidences while seven reported three and two families reported recurring incidences up to four times. The 49 families together have lost 332 working days over the last one year due to water borne diseases. That is close to a week per family. Contrary to the responses that the study team had got from FGDs and key informant interviews that actual expenditure was very low as tribes have access to free treatment, most of the affected households reported significant spending on treating water borne diseases. In many cases, the cost of treatment shown is not exactly the amount spent on medical care or medicines, but associated costs. Some of the households have claimed to have spent amounts ranging from Rs 2000 to Rs 5000 for treatment.

## **Tribal Driven Development**

### **Strategy**

The project's community driven development (CDD) strategy, in broad terms, fits in well with the tribal socio-economic characteristics and cultural values. The concept of self help and community sharing of resources is ingrained in the tribal culture. Involving local communities in decision-making is a part of the tradition. Key issues are discussed and conflicts, if any, are resolved in the presence of hereditary village head and other elders. The tribal development strategy, hence, will also be premised on the CDD principles of: (i) autonomy; (ii) subsidiarity; (iii) demand driven; (iv) participation and inclusion; and (v) cost sharing. The difference, however, will lie in its operationalisation. To ensure inclusion, in contrast to the main project principle of self selection, TDP will resort to targeting. For the target groups, initially, efforts will be made at creating an 'enabling' environment so as to provide for informed decision making, to participate or otherwise, in the project. Subsequently, tribals, mobilized into groups, will be capacitated to plan, implement and operate and maintain the project activities/facilities. Scheme cycle and the associated rules and regulations have, accordingly, been evolved in discussions with tribals and other relevant stakeholders. Special technical assistance through professional agencies will be ensured. *Thus, the TDP*

*will chiefly aim at fostering and empowering autonomous and inclusive grassroots tribal institutions.*

### **Sanitation and hygiene promotion strategy**

Realizing individual and group hygiene behavioral change is central to achieving success in the sanitation area, strong emphasis to be given on strategies planning in information, education and communication (IEC) initiative to inculcate safe hygiene behavior in tribal community. Tribal art, locally specific technologies are to be used in formulating sanitation promotion tools. This include subsidies, greater household involvement, range of technology choices, options for sanitary complexes for “Ooru”, drainage systems, stress on IEC and awareness building, involvement of “Ooru kuttams” and NGOs and local groups and availability of institutional finance/sponsorship. A GP level Resource Team can also be formed during the planning phase by identifying suitable TV or animators. These GP level resource Team will be trained in communication aspects using the traditional as well as modern aids. They may used for the awareness building.

### **Capacity Building Strategy**

Community management is heavily reliant on a supportive framework. Many communities lack the capacity to provide necessary support for technical design and supervision, facilitation and management, long-term training, legal issues, auditing, monitoring and evaluation. Tribal communities also largely do not have the capacity to manage an increased amount of capital (for major repairs, replacement, or extension) over a long period. A number of ‘internal’ community dynamics can threaten community management; e.g. conflicts, poor leadership, lack of transparency, equity issues, theft. So they need capacity building and support on managing of financial resources. Grass root level training in Managerial and technical fields is one method to tackle the issue. Cascading model using tribal promoters/ volunteers is another tool to be used in capacity building. The services of line departments like scheduled castes development dept, Health Dept can be used in some respective areas. A GP level Resource Team can also be formed during the planning phase by identifying suitable TV or animators. These GP level resource Team will be trained in all aspects from planning to post implementation. The GP or BG can use the services of this team for post implementation support.

### **GP Level Voluntary Resource Team (GPRT)**

GP level Resource Team is a three member team identified by the GP forms the CDS of Kudumabasree/ Prerak or Asst Prerak from the NLM, BG Federation volunteers or the Tribal animators or volunteers who have the commitment to give support to the BGs. This task team will be initially identified by the GP during the planning phase and attached to the support organisation or GPAT. KRWSA will give adequate trainings to this team along with the SO/GPAT team. These team members will acquire skill, knowledge and develop positive attitude to support the programme implementation in the course of training. During the trainings they will be given a nominal honorarium to meet the conveyance etc. This amount can be charged under the training cost. After commissioning and exit of the scheme the GPRT will remain as WATSAN master volunteers in the GP to support the BG Federation to sustain the systems. These cadre of people can be used for the follow up refresher trainings when the BG office bearers changes. After the exit the GPRT will be supported by the GP or BG Federations.

## Scheme Cycle

Under the TDP, scheme cycle will be modified to make a provision for creating an enabling environment. As against a 24 months scheme cycle proposed for the non-tribal GPs, the scheme cycle under TDP will be of 39 months with a hand holding support for 6 months.

<b>Exploratory phase</b>	3 months	SO selection, Placing water security consultant mapping of the settlements for water scarcity and firming up the settlements for TDP
<b>Preparatory phase</b>	3 months	Unlearning and learning as well as credibility development. Savings and credit self help groups, functional literacy, hygiene and sanitation promotion and tribal laws education will be introduced
<b>Planning phase</b>	9 months	Mobilizing tribal communities, awareness creation, needs assessment and exposure visits. At the end of the three month, the communities will decide on participating, or otherwise, in the project. Subject to deciding on participation in the project, further phases will be launched. Tribal communities will carry out a situation analysis; identify alternatives and development of proposals, all of which will result in a comprehensive Community Empowerment Plan (CEP). The financing components will include: water supply, household latrines, hygiene and sanitation promotion, functional literacy, women development and capacity building. Signing of agreements.
<b>Implementation phase</b>	15months	the tribal communities will implement the CEP
<b>Post implementation Phase</b>	3 months	Final audit and Account closure BG exit, Takeover of assets created by BG and GP jointly monitoring and evaluation plan implemented
<b>Hand holding (O&amp;M ) Phase</b>	6 months	self-managing by tribals, consolidation and ensuring sustainability of the delivery/facilities

## Technical alternatives

Isolated habitations (with no or highly irregular power supplies) and undulating as well as rather in-accessible areas creates compels the project to make available tribal-friendly technologies. TDP will aim only at small scale water supply schemes for each participating settlement. A basket of alternative technological options, which are cost effective and tribal culture-friendly, will be developed/ compiled and made available to the communities. Full information on the merits and demerits of each technology will be made known for the tribal to enable an informed and appropriate decision making.

In a large number of habitations it would be able to find natural water sources. As far as possible, TDP schemes should be based on gravity flow schemes. Where ever pumping is necessary, a group of youngsters should be trained in trouble shooting and maintenance of pumps. Bore wells and tube wells should be used only in cases where no other source is available. Given the geographic nature of the TDP regions, bore wells and tube wells could even be ruled out as options. The project will have to address the high level of chemical pollution of water sources across the regions caused by the widespread use of chemical fertilizers and pesticides in plantations and farms. Regular water quality tests should be built in as a practice across regions.

### **Selection Criteria**

District wise population of the ST is taken as primary criteria for the selection of districts, accordingly two districts with highest population of ST is identified for the implementation of the project. Wayanadu with ST population of 1,36,062 and Idukki with 5,0973 are the predominant districts having highest percentage of tribal population. Grama Panchayaths in these districts were ranked according the population. The GPs having 16% or more ST population according to 2001 census data are taken up for the implementation.

This way, the following 21 GPs will be covered under the TDP, 14 Grama Panchayath in Wayanadu and 7 GPs in Idukki will be taken up for project implementation. In addition to above as per the local body delimitation Edamalakkudy the first tribal GP was formed in the state. This is GP is carved from the existing Munnar GP, Idukki district and it is an exclusive tribal GP. As there are no basic infrastructure facilities and especially the poor water and sanitation coverage we have to address the issue of Edamalakudy on priority basis. In these circumstances it is proposed to cover 22 GPs under exclusive Tribal development Plan.

### **Tribes of Idukki**

This beautiful High range district is geographically known for its mountainous hills and dense forests. Almost all the scheduled tribes are living in the extreme remote hilly banks and in the deep interiors of thickly growing forests of this district. Even though a state like Kerala is well known for its high literacy rate and cultured habits, in the interior corners of this state, may be the most uncivilized "Adivasis" with their own unique culture and religio-spiritual religious regulations and customs are abiding. Among these tribals Muthuvans, Hillpulayan, Mannan and Oorali are the most prominent tribes. Some Malapandaram and Palian families are also found existing in this district with their apathy and reluctance for Socio-developmental programs. But among this socially retarded tribes the Malayaraya and Ullada factions are little more elevated groups The following clans are found in the prominent scheduled tribes:

- [Malayarayan](#)

- [Mannan](#)
- [Muthuvan](#)
- [Oorali](#)
- [Paliyan](#)
- [Hillpulayan](#)
- [Malapandaram](#)
- [Ulladan](#)
- [Malayan](#)

### **Tribes of Wayanadu**

Wayanad has the largest population of aborigine people in Kerala. The native Adivasis mainly consist of various sects like *Paniyas*, *Kurumas*, *Adiyars*, *Kurichyas*, *Ooralis*, *Kattunaikkans* etc..This is the land where tribes live in thatched roof, mud, bamboo and brick houses set in swampy valleys and plateaus. Of particular mention are thier indegenous streams of holistic herbal medicine which is getting increasing attention in recent years. The adivasis also have a rich legacy of arts and crafts. This includes music, dances,ornementation and handicraft that draw inspiration from natural themes, motifs and materials. The Kurichyas of Wayanad have a great martial tradition. They constituted the army of Pazhassi Raja who engaged the British forces in several battles. The descendants of those warriors are still expert archers. The excellence of Kurichya archery has been exhibited recently at various centres.

Though Adivasis are in the Hindu fold, primitive forms of worship still prevail among them. Ancestral worship and offerings to propitiate the spirits of ancestors are still prevalent.

The Kattunayakan tribes were once the chieftains of the jungle regions. Their main occupation has always been gathering honey and other forest produce. They worship animals, birds, trees, rocks and snakes and believe in ancestor worship as well as practicing black magic and sorcery. The Kurichiya tribes live in the forested areas of Wayanad district. They apply 'Kuri', a sandalwood paste, on their foreheads and chests, and it is possible the name Kurichiya is derived from this custom. The Kurichiya are marginal farmers and most of them have small plots where they grow pepper and other crops. They are expert archers and hunt for game meat. When the Mughals and the British came into their territory, the Kurichiya rose against them in revolt supporting the Raja of Kottayam. Being isolated jungle dwellers, the Kurichiyas continue to practise age-old customs. On returning from a journey, they will bathe before entering the home and those who break dietary laws become outcasts. Kurichiya society follows a matriarchal system. The village headman is elected during a ritual performed before their idols.

**Grama Panchayaths with ST population 16% and above (2001 Census)**

SI No	District	Grama Panchayath	Total Population	Tribal population	% Tribal population	Rank
1	Wayanad	Noolpuzha	26184	10288	39	1
2	Idukki	Vattavada	5102	1586	31	2
3	Wayanad	Kottathara	16636	4600	28	3
4	Idukky	Marayoor	11027	2953	27	4
5	Wayanad	Vengappally	11072	2661	24	5
6	Idukky	Veliyamattom	21557	5131	24	6
7	Wayanad	Panamaram	42922	10056	23	7
8	Wayanad	Thariyode	11843	2649	22	8
9	Wayanad	Meenangadi	32054	7099	22	9
10	Wayanad	Pulpalli	34293	7143	21	10
11	Idukki	Kanthalloor	10935	2250	21	11
12	Wayanad	Kaniambetta	29516	6035	20	12
13	Idukki	Arakkulam	20262	4035	20	13
14	Wayanad	Thondernad	22455	4374	19	14
15	Wayanad	Pozhuthana	17397	3266	19	15
16	Wayanad	Poothadi	39687	7262	18	16
17	Wayanad	Thavinhal	38654	6790	18	17
18	Idukki	Mankulam	9607	1556	16	18
19	Idukki	Adimali	36314	5749	16	19
20	Wayanad	Edavaka	31168	4910	16	20
21	Wayanad	Vellamunda	36415	5720	16	21
<b>Priority Grama Panchayath as per 2010 GP delimitation (First Tribal GP in Kerala)</b>						
22	Idukki	Edamalakudy	2486*	2486	100%	1
*As per the records of Tribal Department						

The tribal population in these 22 GPs together account for 30% of the total tribal population in Kerala as per 2001 census. All the tribal settlements, experiencing water scarcity in these 22 GPs, will be targeted under the TDP.

**Edamalakudy –A Profile:**

Edamalakudy the first Tribal Grama Panchayath in Kerala was formed during the last delimitation of Local bodies in Kerala (2010). Earlier Edamalakudy was the 13<sup>th</sup> ward of Munnar Grama Panchayath. Munnar is the nearest town which is 35 km away from Edamalakudy. To reach Edamalakudy one has to travel by jeep up to Pettimudy and then by walk for nearly 20 km through dense forest. Edamalakudy GP has 101.6 Sq.Km area. There are 28 tribal settlements (named as kudi) spread over 13 wards of the GP. Present population is 2486 (source tribal development department) with 656 HHs. Edamalakudy is situated in KDH Village of Devikulam Taluk. Presently the GP is headed by a tribal woman leader called “ Kanniyamma” The Muthuvan tribe is the community in Edamalakudy and is one of the most isolated forest tribes in the State and as per the tribal tradition the women do not come out to see strangers.

**Road:-** After the formation of the Tribal GP a road is being constructed under MNRREGS and is under way, about 6 km has been completed. A bridge and culvert will be constructed to complete the road, but due to paucity of funds it is delayed. As per the reports Rs.1cr is estimated to complete the road.

**Housing :-** All the tribal houses are of thatched nature as sufficient grass available. Forest department has sanctioned Rs.97 lakhs for infrastructure development in the GP. The forest department has set up a coordination committee of all line departments to complete the project in time One Forest range office with staff is working in Edamalakudy.

**Education;-** All most all the tribes are illiterate, the highest education level of majority of the tribes is 4<sup>th</sup> std, few of them have completed SSLC. Only five to six persons have completed plus two. There is only one Government Tribal Lower Primary School which is almost 10 to 15 km away from the nearest settlement. There are other four single teacher schools and about 10 Anganwadi's . These are the basic educational facility available in Edamalakudy.

**Occupation:-** Most of the tribes are farmers, they cultivate Ragi, Rice, Cardamom etc. Vanavikasana Samithy (VSS) and Vanasree net work under the forest department will procure the products and market. According to the tribal officer this has to be strengthened to get the maximum benefit to tribes for their production. They used to collect forest goods like honey, firewood etc for their living,

**Health :-** One ANM centre ( Sub centre of Primary Health Centre ) with four staff members are posted there to look after the Health needs of the tribes. But most of the time the staff members are away or the post is lying vacant. The tribes do not get health protection as envisaged by the Government.

**Water:-** There is a river flowing through these GP and this is the only water facility available for the tribes for their all water needs. Springs are also available and most of them are perennial. The tribes collect water by their own methods from these springs.

**Sanitation:-**There is no sanitation facility in the settlements and tribes are used to open defecation. There are cases of water borne diseases as reported by the tribal officer.

**Language:-** Most of the tribes do not use Malayalam or Tamil, according to the tribal officer they use their own language. An outsider cannot communicate with them without the help of an interpreter from their community.

**Tribal Volunteers:** Four tribal volunteers are available with tribal department for facilitating the development activities in that area .

## **Implementation Schedule**

The first batch implementation will start from Jul 2011. Initially 2 GPs will be covered. After 9 months, drawing on the lessons learnt, second batch will be initiated in April 2012. The third batch, based on the cumulative experiences of the first and second batches, will begin in April 2013. This way, scope is provided for learning and incorporating the lessons as the project progresses.

## **Study on Social Organisation of Tribes**

For a development intervention of Jalanidhi's nature to succeed among scheduled tribes, it is necessary that the project considers the current socio-economic and cultural state of each of the tribes. General assumptions cannot work as the minimal spaces that each of these communities live has their own peculiarities that need specific improvisations in the methodology. Weaving these into the strategic fabric of the project would be a precondition for success. A quick appraisal of the social organisation and the current state of self-governance of each of the scheduled tribe for which a project is initiated should be carried out at the pre-planning stage. The study should examine and document the nature of traditional leadership, social organisation, and the engagement of the community with the social and political institutions outside the community. The findings of the study should be used for fine-tuning the intervention strategy for each community.

## **Institutional Arrangements**

### ***Tribals' perceptions***

Currently, development assistance for the tribals flow from Gram/Block Panchayaths and SC/ST department. In the wake of decentralized planning process, GP and BPs have assumed prominence. According to the TDP study, tribals have serious concerns about the role and functioning of the Panchayaths:

Tribals view GP/BP as a mere political body with its members surfacing only during elections to seek votes.

Gram Sabha meetings' venue and timings are always changed in the last minute by the Ward Members thus denying an opportunity for the tribals to raise their voice, to put forward their needs and priorities



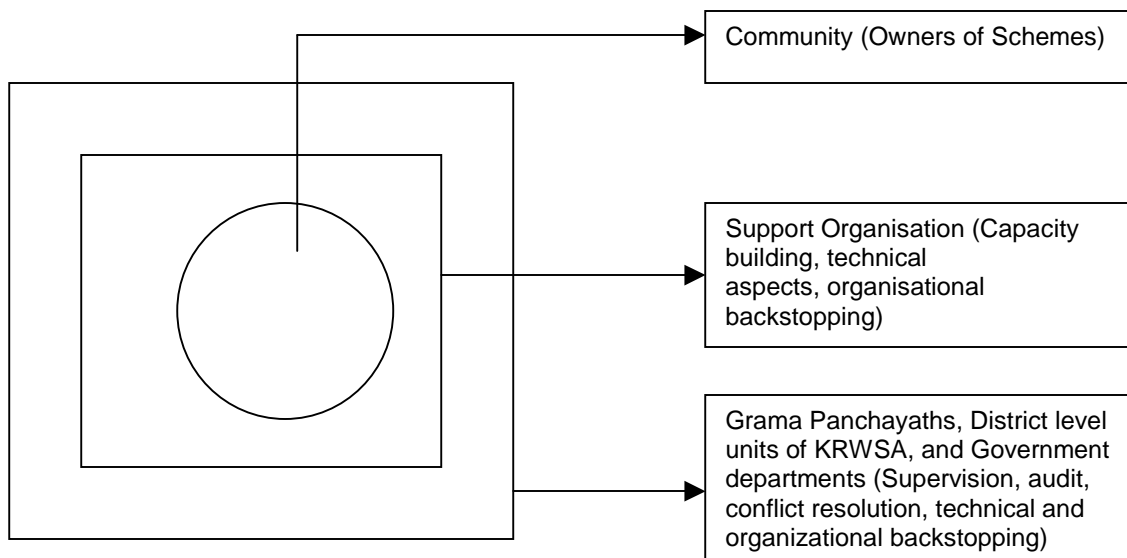
Development programs meant for tribals are planned in such a way as to benefit more the non-tribals. Diversion, misuse and misappropriation are common.

Community contracting procedures and local technological initiatives are not taken due note of. Concerns are also expressed on limited opportunities of exposure to alternative technologies, especially of water supply and sanitation.

Substantial delays in processing of requests or assistance coupled with rent seeking are rampant.

Tribals have expressed a distinct desire to be 'autonomous'. However, they would like to maintain an organic link with the Panchayaths. Tribals would like Panchayaths to perform the role of a facilitator rather than as an executor. In this background, the following institutional arrangements are proposed.

A schematic representation of the institutional arrangement typical of Jalanidhi is given in figure below.



The focus of the scheme is community, with an NGO (or GPAT arrangement) playing the role of a support organisation. Grama Panchayaths, the Regional level units of KRWSA and line departments form the third layer.

### ***Beneficiary Group and Beneficiary Committee***

Two members (one male and the other female) from every benefiting household in a settlement will constitute a Beneficiary Group (BG). All BGs will be a registered body under the state's applicable law. Each BG will constitute a Beneficiary Committee (BC), to serve as an Executive Committee comprising a President, Vice President, Secretary and Treasurer. Bye-laws and Memorandum of Association stipulating rules and regulations as well as functions and responsibilities have been already developed during the project preparation. BCs will be the primary management unit and responsible for planning, implementing and operating and maintaining facilities/ deliveries exclusively on their own.

Each BC will formulate a Community Empowerment Plan (CEP) similar to that of the non-tribal GPs and implement the same.

### ***Grama Panchayaths (GP)***

GP will be the nodal agency at the Panchayath level apex agency and will be responsible for facilitating in the selection of the schemes /BGs, monitoring of the BGs activities and in liaisoning with other departments/ agencies and in dovetailing with other development schemes. The fund is routed through Grama Panchayaths.

A pool of panchayath secretaries will be identified and empanelled for special training, to be organised at state level, on the philosophy, principles, and methodology of Jalanidhi. There should be follow up training to reinforce the concepts and also to communicate any change in approach or method. KRWSA may in consultation with the Department of Local Self Government to ensure that the secretaries in all Jalanidhi panchayaths are from this pool only and through out the project cycle.

### ***Support Organizations (SOs)/Grama Panchayath Action Team (G-PAT)***

External professional agencies will be enlisted to provide community development, technical and financial support to the tribal communities in planning and implementing the project activities. SO/GPAT staffing will be distinctly different from that of those working in the non-tribal areas. Tribal Volunteers (TVs), similar to Social Animators, one for every settlement, will form the bulk of the outreach professionals in a SO/GPAT. That is, any SO/GPAT will be required to choose educated youth, from among the tribals only, arrange for capacitating them to provide the required support to the communities. Five TVs would form a Spear-Head Team (SHT) or GP level Resource Team. Senior professionals will continuously mentor the TVs. These GP level Resource Team members can be used for the follow up post implementation support.

Special care should be taken to select the right NGOs and CSOs as support organisation for TDP projects. Where ever possible, an organisation with a long term interest in the community should be selected. Experience in implementation of water supply schemes alone should not be the criterion for selection. The support organization should be willing to engage with the project for the entire scheme cycle. Proven track record in implementing participatory development projects with elaborate capacity building components should be a condition for selection. The NGO should also be evaluated for leadership and overall human resource potential. The NGOs handling TDP schemes should be given special training which would improve their ability to address the specific challenges posed by the specific contexts of the TDP schemes.

### ***KRWSA- RPMU***

KRWSA will function as a Project Management Unit either directly or through its Regional Project Management Units with an extended support to the GPs by way of GPST. In the case of TDP panchayaths, the GPST level officials and technical staff of Jalanidhi should remain the same for the entire project scheme cycle. These officers should be specially trained in working with tribes.

### ***Scheme approval***

A committee comprising the Directors (Operations, HRD and Technical), RPMU Manager, SO Team Leader/ GPAT TL, and two external experts will be responsible for according approvals. The Director, Operations will be the chairperson and RPM, KRWSA convener. The committee will take due note of the discussions of the Gram and Block Panchayath level committees.

### **GP level committees**

The following committees will be set up to advice, review and/or steer the project implementation:

<p><b>Gram Panchayath level Review Committee</b>, to meet once in two months, to review the progress, provide GP level support and enable dovetailing with other development schemes.</p>	<p><b>President, GP (Chairperson)</b>  Vice President, GP  Standing Committee Chairperson (H &amp;E), GP  Concerned Ward Member  Representatives of BGs  Team Leader, concerned SO (Convener)  Representatives of Tribal Department (TEO), Health &amp; Family Welfare, Forests  GPST -KRWSA</p>
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### **District Level Monitoring Committee:**

To achieve the desired results and timely implementation of the project a district level monitoring committee will be formed under the chairmanship of sub collector of the district administration.

<p><b>District Level Monitoring Committee</b>  District level review to meet once in two months, to review the progress, provide District level support and enable a facilitating environment for the implementation of scheme with full participation of the tribal communities.</p>	<p><b>Sub Collector, District Administration (Chairperson)</b>  President's, GP's  Representatives of BGFs  District Tribal Development Officer (Convener )  Team Leader, concerned SO  Tribal Extension officers, DMO, Forest Officer.  Regional Director (KRWSA) Community Development Specialist and Manager (Technical) -KRWSA</p>
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### **Responsibilities of the Monitoring Committee:**

- Review the project implementation progress.
- Guide and advise the project implementation.
- Coordination of various line departments and required facilitation.
- Necessary support for various departments' approval and clearances required for the project.

- Land acquisition issues with other departments.

### ***Cost Sharing, Financing and Fund flows***

The TDP study has revealed that both the GP and tribal communities are willing to contribute towards capital cost (water supply schemes). The Project /GOK recommended that communities' contribution should be more in the form of kind and less in cash. In view of this, project proposes that GPs will contribute 15% and that the Beneficiary Groups will contribute 5% of the capital cost (of water supply schemes). The BG's contribution will be distinctly in two categories: cash (1%) and kind (4%). In the case of non-tribals, BGs are expected to contribute 10%, either in cash or kind. Total number of settlements/schemes likely to be covered under the project being 440, total costs will be Rs 650.65 million. Of this, hardware/ construction costs would be Rs 575.36 million (88.43%) and the software costs, including water Security plan, water quality monitoring, IEC and capacity building is Rs 25.35 million (3.90%) GP strengthening & Institutional expenses contributes 4.4 million (0.68%) and 45.54 million (6.99%) respectively. Total per capita household investment costs work out to Rs 36067 (Per capita cost Rs.7213) TDP cost estimates are presented in a separate cost table.

The project funds will flow from KRWSA to the BGs as per a prior agreed set of conditions related to opening of bank accounts, timing of releases, pattern of withdrawal and book-keeping. All project specific funds will flow into a special bank account which will be operated jointly by the SO and BG representative. Similarly, all procurements will be done jointly by SO and BG, but, under the guidance of, and concurrence from KRWSA. The fund flows as well as roles and responsibilities will be captured in a Memorandum of Understanding to be signed by KRWSA, SO and BG.

### **BG Contribution –Cross subsidization**

If the tribal people are unable to pay their contribution towards the capital cost, we may take a lenient view and cross subsidization by other well off people, NGO or taking out from GP funds may be allowed.

### **Monitoring and Evaluation**

Project has planned for a four-fold Monitoring and Evaluation (M&E) system:

**Community Monitoring** -- Each BG will be capacitated to assess the implementation performance themselves. Simple formats involving indicators (chiefly, quantitative and some qualitative) as perceived and articulated by the communities will be developed for the purpose. Essentially, this will be an assessment of the 'observed' occurrences against 'expected' or planned actions. This will be conducted throughout the scheme cycle. Details will be captured in the CEP. Results of individual BGs will be aggregated by the SO and maintained at the state level through a computerized Management Information System (MIS).

**Process Monitoring** -- This will aim at assessing the participatory processes (expected to result in empowerment of tribals). It will be done batch-wise, by an external agency. This will also include an assessment of the functioning and performance of the institutional coordination committees (GP/BP/State) set up under the project.

**Sustainability Monitoring** -- assess the likelihood of sustainability of the service delivery, in a sample settlement, in each batch and enable draw action plans for post-implementation support employing a Village Immersion Program based approach. This will be done by a team of different set of stakeholders including the village communities.

**Impact Evaluation** -- a comprehensive evaluation of the impacts as a result of the TDP intervention, at the end of the program, conducted by an external agency.

### **Exit Strategy**

Providing the support of Technical Facilitators for a period of two years after the commissioning of the project should be part of the exit strategy. Handholding of the beneficiaries in addressing and resolving technical issues should be continued during this period. Fund for this technical support can be met from NRDWP fund for sustainability or from GP plan funds.

### **Conclusion:**

It is recognized fact that the tribal belt are among the most backward area in our state. In spite of concerted effort put forth by our Government, the conditions of tribals have not changed much, may be because of various historical as well as environmental reasons. So the success of the Tribal development plan of KRWSA is subjected to the involvement of local tribal people directly or through their representative organizations; Oorukuttams and the whole hearted support of local self Government. The involvement of NGOs who have experience in tribal area and inter linkages with other line departments is another attribute for the effective implementation of the project.

### *Attachment.1*

#### **District wise ST population -2001 census**

<b>SI No</b>	<b>District</b>	<b>Total population</b>	<b>Total Tribal population</b>	<b>Percentage to total population</b>
1	Kannur	2,408,956	1 9,969	0 .83
2	Alappuzha	2,109,160	3, 131	0 .15
3	Ernakulam	3,105,798	1 0,046	0 .32
4	Idukki	1,129,221	5 0,973	4 .51
5	Kasargode	1,204,078	3 0,338	2 .52
6	Kollam	2,585,208	5, 190	0 .20
7	Kottayam	1,953,646	1 8,340	0 .94
8	Kozhikode	2,879,131	5, 940	0 .21
9	Malappuram	3,625,471	1 2,267	0 .34
10	Palakkad	2,617,482	3 9,665	1 .52

11	Pathanamthitta	1,234,016	6, 549	0 .53
12	Thiruvananthapuram	3,234,356	2 0,893	0 .65
13	Thrissur	2,974,232	4, 826	0 .16
14	Wayanad	780,619	1,36,062	17.43
<b>Total</b>		<b>31,841,374</b>	<b>3,64,189</b>	<b>1.14</b>

## Attachment 2

## District wise ST population T/R/U -2001 census

S.No.	District	TRU	ST Population	Total Population	ST Population %age
1	Alappuzha	Total	3,131	2,109,160	0.15%
2	Alappuzha	Rural	1,877	1,487,703	0.13%
3	Alappuzha	Urban	1,254	621,457	0.20%
4	Ernakulam	Total	10,046	3,105,798	0.32%
5	Ernakulam	Rural	6,668	1,628,713	0.41%
6	Ernakulam	Urban	3,378	1,477,085	0.23%
7	Idukki	Total	50,973	1,129,221	4.51%
8	Idukki	Rural	50,128	1,071,628	4.68%
9	Idukki	Urban	845	57,593	1.47%
10	Kannur	Total	19,969	2,408,956	0.83%
11	Kannur	Rural	19,417	1,196,058	1.62%
12	Kannur	Urban	552	1,212,898	0.05%
13	Kasaragod	Total	30,338	1,204,078	2.52%
14	Kasaragod	Rural	29,720	970,378	3.06%
15	Kasaragod	Urban	618	233,700	0.26%
16	Kollam	Total	5,190	2,585,208	0.20%
17	Kollam	Rural	4,623	2,119,230	0.22%
18	Kollam	Urban	567	465,978	0.12%
19	Kottayam	Total	18,340	1,953,646	0.94%
20	Kottayam	Rural	17,974	1,653,838	1.09%
21	Kottayam	Urban	366	299,808	0.12%
22	Kozhikode	Total	5,940	2,879,131	0.21%
23	Kozhikode	Rural	5,413	1,777,974	0.30%
24	Kozhikode	Urban	527	1,101,157	0.05%
25	Malappuram	Total	12,267	3,625,471	0.34%
26	Malappuram	Rural	12,043	3,269,301	0.37%
27	Malappuram	Urban	224	356,170	0.06%
28	Palakkad	Total	39,665	2,617,482	1.52%
29	Palakkad	Rural	39,236	2,260,907	1.74%
30	Palakkad	Urban	429	356,575	0.12%
31	Pathanamthitta	Total	6,549	1,234,016	0.53%

32	Pathanamthitta	Rural	6,235	1,110,218	0.56%
33	Pathanamthitta	Urban	314	123,798	0.25%
34	Thiruvananthapuram	Total	20,893	3,234,356	0.65%
35	Thiruvananthapuram	Rural	19,419	2,142,695	0.91%
36	Thiruvananthapuram	Urban	1,474	1,091,661	0.14%
37	Thrissur	Total	4,826	2,974,232	0.16%
38	Thrissur	Rural	4,332	2,134,799	0.20%
39	Thrissur	Urban	494	839,433	0.06%
40	Wayanad	Total	136,062	780,619	17.43%
41	Wayanad	Rural	132,934	751,007	17.70%
42	Wayanad	Urban	3,128	29,612	10.56%

### Attachment 3

#### LIST OF SCHEDULED TRIBES IN THE KERALA STATE

( As amended by the Scheduled Castes and Scheduled Tribes Order (Amendment Act) 1976 and as amended by the Constitution (Scheduled castes) Orders (Second Amendment) Act, 2002 (Act 61 of 2002) vide Part VIII- Kerala- Schedule I notified in the Gazette of India, dated 18 December, 2002) and (As amended by the Scheduled Castes and Scheduled Tribes Orders (Amendment) Act 2002 (Act 10 of 2003) vide Part VII- Kerala- Second Schedule notified in the Gazette of India dated 8 January, 2003)

1. Adiyar
2. Aranda (Arandan)
3. Eravallan
4. Hill Pulaya(Mala Pulayan, Kurumba Pulayan, Karavazhi Pulayan, Pamba Pulayan)
5. Irular,Irulan
6. Kadar (Wayanad Kadar)
7. Kanikkaran,Kanikar
8. Karimpalan
9. Kattunayakan
10. Kochuvelan
11. Koraga
12. Kudiya,Melakudi
13. Kurichchan (Kurichiyan)



14. Kurumans (Mullu Kuruman, Mulla Kuruman, Mala Kuruman)
15. Kurumbas (Kurumbar, Kurumban)
16. Mahamalar
17. Malai Arayan (Mala Arayan)
18. Malai Pandaran
19. Malai Vedan (Mala Vedan)
20. Malakkuravan
21. Malasar
22. Malayan, Nattu Malayan, Konga Malayan (Excluding the areas comprising the Kasaragod, Kannur, Wayanad and Kozhikode Districts)
23. Mavilan
24. Malayarayar
25. Mannan (to be spelt in Malayalam script in parenthesis)
26. Muthuvan, Mudugar, Muduvan
27. Palleyan, Palliyan, Paliyar, Palliya
28. Paniyan
29. Ulladan, Ullatan
30. Uraly
31. Mala Vettuvan (in Kasaragod and Kannur Districts)
32. Ten Kurumban, Jenu Kurumban
33. Thachenadan, Thachenadan, Moopan
34. Cholanaickan
35. Malapanickar
  
36. Vettakuruman

## Attachment 4







## Tribal Development (Financial Plan)

Sl.No	Item	Unit Cost	Units per GP	Total Units	Amount in Rs.			
					BG	GP	GOK	Total
1	<i>Water Supply</i>							
1.1	Water Supply <sup>1</sup>	1150554	20	440	25312188 (5%)	75936564 (15%)	404995008 (80%)	506243760
1.2	Specific Treatment <sup>2</sup> plant for WQ affected habitations	70000	2	44	154000 (5%)	462000 (15%)	2464000 (80%)	3080000
2	<i>GWR</i>							
2.1	Water Security and Development Plan	500000	1	22			11000000 (100%)	11000000
2.2	GP Centric GWR	3000000	LS	22	0	13200000 (20%)	52800000 (80%)	66000000
3	<i>Sanitation</i>							
3.1	House hold level SWSM unit (Ring Composting)	1800	1	22			39600 (100%)	39600
	<b>Sub Total</b>				<b>25466188</b>	<b>89598564</b>	<b>471298608</b>	<b>586363360</b>
4	Capacity Building <sup>3</sup>	392366	LS	22			8632052 (100%)	8632052
5	IEC <sup>3</sup>	200000	LS	22			4400000 (100%)	4400000
6	Water Quality Monitoring <sup>3</sup>	3000	20	440			1320000 (100%)	1320000
7	GP Strengthening <sup>3</sup>	200000	1	22			4400000 (100%)	4400000
8	Institutional Expenses <sup>3</sup>	2069858	1	22			45536876 (100%)	45536876
	<b>Grand Total</b>				<b>25466188</b>	<b>89598564</b>	<b>526955484</b>	<b>650652288</b>

1. Assuming 18 BG comprising 41 HH shall be formed in each 22 TDP Panchayaths
2. Assumes 10% GPs have Water quality issues
3. Already included in comprehensive plans of each component.

Attachment 5  
TDP Project Cycle

Batch	No of GPs per batch	2011		2012				2013				2014				2015				2016			
		Jul-Sep	Oct -Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct -Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct -Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct -Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct -Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct -Dec
Batch 1	2	Exploratory Phase	Preparatory Phase	Planning Phase	Planning Phase	Planning Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Post Implementation Phase	Handholding O&M Phase	Handholding O&M Phase						
Batch 2	11			Exploratory Phase	Preparatory Phase	Planning Phase	Planning Phase	Planning Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Post Implementation Phase	Handholding O&M Phase	Handholding O&M Phase					
Batch 3	9							Exploratory Phase	Preparatory Phase	Planning Phase	Planning Phase	Planning Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Implementation Phase	Post Implementation Phase	Handholding O&M Phase	Handholding O&M Phase		
<b>Total</b>	<b>22</b>																						

-  Exploratory Phase
-  Preparatory Phase
-  Planning Phase
-  Implementation Phase
-  Post Implementation Phase
-  Handholding O&M Phase

