

Tribal Health Development Plan

1. Preamble:

The Tribals in Tamil Nadu until fairly recently lived in complete isolation from the outside world. Some of them were hunter/gatherers living from day to day on what the forest provided, some practised shifting cultivation, some were bonded labour for the local landlords and others were artisans producing pots, implements and baskets. Large areas of forest provided food, medicine and building materials. Open land was available in plenty for grazing and cultivation of ragi and other millets.

This situation started to change in the early 1900's with the opening up of forests to plantations and settlers from neighbouring areas moving onto traditional tribal lands leading to intense pressure on land and resources.

Over the years, social structure within and interdependence between the tribes have declined, as have traditions, skills and many other aspects of their way of life; including dress, dialects, and names. There can be many reasons for these changes, such as education, the felt need to 'integrate' or be like everybody else, social stigma, cinema culture, or the availability of manufactured goods or allopathic medicines. These changes approximate to changes in society as a whole and are not necessarily negative.

Land once used for shifting cultivation and traditional Tribal lands have mainly been occupied by others, though in some cases the tribals have been granted 'Patta'. Where tribals have been given 'Patta' in the past, this alien idea of ownership has been difficult to assimilate and much land has found its way into the hands of non-tribals by fair means or foul. Strict forest laws have virtually put an end to hunting, food and herb collection and the ready supply of building/craft materials. Diet has changed considerably from ragi and other staple with local greens and vegetables to one of mainly rice (ration shop dependence) with not much else with consequent deterioration in health. Employment practice has also changed considerably; daily wage sometimes quite high, is now the norm whereas in the past bonded labour provided a measure of security all year round and barter of labour or products was common. There was exploitation then and there still is now.

To some extent the traditional role of older people of looking after the young and passing on traditions and skills has been eclipsed by balawadis and schools. This along with lack of respect, neglect and the inability to come to terms with change has left many old people feeling undervalued, dependent and powerless. With the decline of traditional social structure, injustice, social stigma, loss of identity, low self esteem and many other factors; drunkenness, violence and suicide are fairly common whereas previously they were very rare. Family disputes and disputes with neighbours now escalate, whereas once the community would settle them, as one party would move away. Inevitably the women have to bear many of the

consequences and have to manage to feed the family on very little. As more and more women are going to work, their economic independence increases however.

Education of the young has brought benefits, such as basic literacy and the opportunity to interact with non-tribal children. Many however, do not progress beyond 5th standard and there are many who do not get that far or even enter school at all. For those who study on further, the expectation of employment is often not realised despite reservation policy. Thus there is a reservoir of partly educated youth unable to get employment, often lacking the commercial acumen to start their own business who are at the same time becoming rootless and are susceptible to all the influences and pressures of modern society, and have little land to inherit or cultivate.

2. Statistics:

The Tribal Population of the State as per 1991 Census is 5.74 lakhs. They form 1.03% of the total population and 88% of them live in rural areas. Majority of them are economically deprived, socially marginalized and lack resources. Their access to Health, Education, Employment and other income generation opportunities is limited. The Literacy Percentage of the Scheduled Tribes is 27.89% as against 63.72 of the General Population.

A separate Directorate has been created in Tamil Nadu for the welfare of the tribals. This directorate has identified 36 Scheduled Tribal Communities in 13 districts within the State. Six of these communities – Toda, Kota, Kurumba, Irular, Pania and Kattunaiken have been further identified as Primitive Tribal Groups. The Integrated Tribal Development Area Programme (ITDP) of the GOI is implemented in areas where the population of the Scheduled Tribes exceeds 50% of the local population - other tribal groups not covered under this Program are called as Dispersed Tribes. All the tribal communities in the Nilgiris District belong to the Primitive Tribal Groups.

Table 1: Districts implementing the ITDP in Tamil Nadu

Name of the District	Tribal Area
Dharmapuri	Sitheri Hills
Namakkal	Kolli Hills
Salem	Yercaud Hills
Salem	Kalrayan Hills
Salem	Arunathumalai
Salem	Pachamalai
Trichy	Pachamalai
Tiruvannalamalai	Jawadhi Hills
Villupuram	Kalrayan Hills
Vellore	Yellagiri Hills

All departments earmark specific allocations from their regular planned Programmes for Tribal Welfare as part of the Special Component Plan or Tribal Sub

Plan. This is supplemented with Special Central Assistance from the GOI. Additional Grant-in-aid is also sanctioned every year for providing infrastructure facilities in Tribal areas by the GOI. The District Collector is the Key Coordinating Officer at district level for monitoring all Tribal Welfare Programmes.

An ICMR Project is being implemented in the three districts of Kancheepuram, Tiruvallur and Nilgiris covering the Primitive Tribal Groups for creating and continually training a cadre of Community Health Volunteers and Dais. The Hill Area Development Programme is implemented for the welfare of the Tribals in the Nilgiris District.

The Dept. of Tribal Welfare is running 253 Tribal Residential Schools (193 Primary Schools, 42 Middle Schools, 8 High Schools and 10 Higher Secondary Schools) with about 45600 students (almost 10% of the entire tribal population of the state) resident in them. There are a further 26 Tribal Hostels in 11 districts that are run by the department with about 1300 students resident there.

3. Social Assessment Survey

The Qualitative Summary and Conclusions (Page 76) of the Social Assessment Survey carried out as part of the mid term review of the DANIDA Health Care Project Phase III in Tamil Nadu shows that

- a. Low socio-economic groups are not going to private facilities. In view of this privatizing may not help.
- b. In PHCs, doctors see patients for a few hours only in the morning. In remote PHCs, the Pharmacists often conduct clinics.
- c. Rural population in general does not know the difference between the qualified allopathic and indigenous practitioners.
- d. Poor people in general go to government hospitals and the majority of the groups said that if they had a choice (money) they will go to private facilities.
- e. According to the groups, rude behaviour, long waiting hours and the corrupt practices in the government hospitals / centers are the major problem. Many groups feel doctors are closing their eyes to corrupt practices. If they are more assertive and check on these practices, the hospital will be a better place.
- f. While ranking the performance of personnel by the low socio-economic groups, VHNs ranked first, despite the fact that 50 percent of them do not stay in their sub-centers. However, their visits to the villages and MCH activities are very much appreciated. At the same time the nursing personnel (staff nurses, ANMs, FNOs and MNOs) working at the clinics are ranked the last. Reason was their rude behaviour at clinics as well as soliciting bribes.

- g. The main health need of the community was transportation during emergencies. Second, the need of those residing in remote areas, is residential stay of the basic health personnel in their villages to provide emergency care. Need for proper roads were also requested. In PHCs, round the clock 24 hours service was another major need.
- h. Traditional treatment has almost disappeared from the tribal population.

33 villages were sampled in 6 districts in Tamil Nadu for the survey – Tiruvallur, Cuddalore, Dharmapuri, Thanjavur, Namakkal and Madurai. One or two tribal villages were included in each of the non-coastal districts and selection was by purposive sampling. General information (Page 15) on the villages showed

- a. The nearest PHC was at least 5-9 km away for 36.4% of the villages while it was within 1-4km for 27.3% of the villages.
- b. The distance to the nearest district hospital was 20 kms or more for 78.8% of the villages. The nearest taluk / general hospital was between 10-19 km for 36.4% of the villages while it was more than 20 kms for 30.3%.
- c. Transport facilities seemed to be better with nearly half the villages (51.5%) having bus transport to the nearest govt.health facility.
- d. Only 39.4% of the villages had emergency transport facility. Auto rickshaw was the mode of emergency transport in 46.2%.
- e. Health staff availability at the health facility – VHN was available at the nearest sub centre in only 36.4% of the villages, MO was available for 2 hours or less for 39.4% of the villages.

The survey also discussed the various reasons for using and not using government health facilities (Page 49). The low socio-economic groups use government health facilities primarily because it is free. A small group experienced kind behaviour from doctors. However, many negative experiences were described. Briefly these are

- 1) Rude behaviour and abusive language by staff.
- 2) Bribe taking
- 3) Poor quality of care by MOs
- 4) Lack of privacy
- 5) Refusal to attend cases at night
- 6) No one available after 12 Noon
- 7) Soliciting for private clinics

The causes of death in tribal areas and remote villages were usually due to transportation problems and especially at night. Poor roads, elephant menace and lack of money complicated the issue further.

4. Health Problems of Tribals and constraints to accessing health care.

Health problems of tribals across Tamil Nadu are not uniform. Despite a number of interventions by the state government, the vulnerable tribal community is still unable to access basic health care. They continue to face a number of social, cultural, legal, economic and political constraints.

A limited survey in 6 districts showed that the data available with the District Health Authorities was not desegregated and almost no data was available on types of disease and disease burden among tribals / differing tribal groups except that available with a few NGOs and from specific Programmes like the NLEP and the RNTCP. There is also a difference between classification of “PHCs / HSCs in tribal areas” at state level and individual districts. The limited data collected from the districts has been tabulated in Annex 1.

A consultation was held with various NGOs working with different tribal groups in the Health and Social Welfare sector in September 2003. The key issues raised during that consultation and the recommendations made are in Annex 2. Four Focused Group Discussions were held with tribal people and tribal health workers / tribal sangams and an outline of these discussions is attached with Annex 3.

Sickle Cell Anaemia is a genetic problem documented in the tribal populations of the Nilgiris District. Prevalence of SCA among other tribal groups in Tamil Nadu is not known. The Indian Council of Medical Research and the Nilagiri Adiwasi Welfare Association have conducted several screening camps for SCA among tribal groups in the Nilgiris District and the data available with them is shown in Table 2 below.

Table 2: Sickle Cell Anemia – the Nilgiris experience

Number of Taluks covered in the District	6 – Pandalur, Gudalur, Ooty, Coonoor, Kotagiri and Manjoor	
Number of tribal hamlets screened	76	
Number of tribal families studied	925	
Tribal Groups studied	Paniya, Mullakurumba, Kurumba and Irula.	
Number of individuals screened	Adult Male	779
	Adult Female	1204
	Children	503
	Total	2516
Number of individuals screened by tribe	Paniya	755
	Mullakurumba	443
	Kurumba	572
	Irula	746
	Total	2516

Results of the screening	SS	48	
	AS	658	
	AA	1584	
	Iron Def. Anemia	226	
	Total	2516	
Percentage Prevalence among screened by tribe	Paniya	SS	2.11%
		AS	27.9%
	Mullakurumba	SS	2.03%
		AS	26.1%
	Irula	SS	1.47%
		AS	23.5%
	Kurumba	SS	2.09%
		AS	27%

There is insufficient data on Infant and Maternal Mortality among tribal people. One NGO working among an estimated population of about 12000 spread over 210 hamlets in two taluks of the district had limited data on maternal and child health. A small cohort studied over a 3 year period at this NGO revealed that in 937 pregnancies followed up to delivery by them, only 76% were examined 3 times by even a basic health worker, 37 ended in stillbirth / Intra-uterine death, and only 35% delivered in hospitals. There were 6 maternal deaths in the group studied. The data is reproduced in the table below:

Table 3 : Maternal Health among tribals (NGO)

Year	99-00	00-01	02-03	Total
Total Antenatals registered	483	320	470	1273
No. examined three times (by health worker or doctor)	356(73%)	242(75%)	244(80.5%)	842(66%)
Number followed up to delivery	375	259	303*	937(74%)
Abortion	38(10%)	23(9%)	N/A	61(7%)
Still birth / IUD	22(6%)	8(3%)	7(2%)	37(4%)
Neonatal death	10(3%)	6(2%)	5(2%)	21(2%)
Maternal death	4(1%)	2(1%)	0	6(1%)
Number delivering in any hospital	71(19%)	102(40%)	136(45%)	309(33%)

*10 / 303 deliveries were Caesarian sections.

Deficiency of essential components in diet leading to malnutrition, protein calorie malnutrition and micronutrient deficiencies (vitamin A, iron and iodine) are common.

Goiter of various grades is also endemic in some of the tribal areas. There is however insufficient data on the prevalence of malnutrition in tribal children. The same NGO also had information for a cohort of children examined at their clinics over a three year period as shown in the table below:

Table 4 : Malnutrition in tribal children (NGO)

	99-00	00-01	02-03	Total
Total number of children under 5 examined	1243	1194	1225	3662
Normal weight	659(67%)	634(68%)	876(69%)	2169(59%)
Grade 2 and 3 malnutrition	322(33%)	298(32%)	379(31%)	999(27%)
Infant death	8	4	8	20(0.5%)

Out of the 1216 eligible couples enumerated in this 12000 population, only 252 were using any form of Planned Parenthood methods. Similarly, 123 deaths were enumerated in one year (2002-03) in this population with neonatal deaths forming a subset of 5, infant deaths another subset of 8 and children 1-5 forming a subset of 5. Interestingly, not one single case of STD / HIV was picked up in this population.

While several NGOs seemed to have capacity to deliver quality health care services, they faced problems with fund raising for services and there did not seem to be adequate linking with the government health facilities nor was there enough supervision / monitoring of their health care service delivery.

The social constraints faced by the tribals start at childhood and remain with them throughout life. Beginning from low weight at birth to poor nutrition, unsafe drinking water, poor sanitation, disease, and lack of education / awareness leading to lack of job opportunities these factors often lead to low self-esteem and low confidence levels and a feeling of helplessness. Culturally the stranglehold of feudal value systems also imposes various restrictions on them. Besides these factors, the lack of exposure to the outside world and to media leads to greater marginalization. People have a strong belief in supernatural powers and so at times of illness often resort to 'spirit worship'. People are so attached to their roots that even in adverse conditions they do not think in terms of relocation.

As most of the vulnerable Tribal people live Below the Poverty Line, lack of financial resources is the primary problem and often dictates their health seeking behaviour. A large number of people possess no animal wealth, no work, and no land. Borrowing money, mortgaging land or pawning ornaments and / or other valuables is a common practice for availing healthcare services and places them in a perpetual debt trap. There is a lack of knowledge of the capital economy and an inability to handle cash.

4.1. Summary of Constraints to access / utilize health services include

- a. Inadequate financial resources.
- b. Poor or incorrect knowledge dictating inadequate health seeking behaviour.
- c. Manpower at Health Facilities either not available or available only for a very small window of time.
- d. Inadequate database of tribal population based disease burden / health care utilization to plan / evaluate intervention.
- e. Special problems like sickle cell anemia, tuberculosis etc.,
- f. Remoteness of many tribal villages from the nearest PHC / General Hospital.
- g. Malnutrition.
- h. Inadequate accountability and monitoring of health service delivery to tribal populations.
- i. Unhelpful attitudes of health service personnel.

5. Tribal Development Plan

The Tribal Development Plan (TDP) includes a broad range of interventions to address the issues identified and provide quality health care to tribal populations in Tamil Nadu. One important aspect of the TDP is that many of the already existing programs intended to increase access of Health Services to the Tribal People will be integrated and appropriately strengthened, so as to reduce duplication and wastage of resources. This includes the tribal component of the RCH project, the Revised National TB Control Programme, the National Leprosy Eradication Programme and other on-going government welfare schemes. The TDP will extensively support NGO participation in Health Care Delivery to the tribal populations in the state. It is intended to hold further consultations with NGOs working in Tribal areas and the Forest Department and include feedback and suggestions into this TDP at a later stage.

The range of interventions planned include:

Strengthening of Service Delivery

5.1.1. Filling up of key vacancies at PHC / HSC / Government Hospital level through the routine recruitment process has not worked in the past. Very often the staffs posted to these vacancies are not willing to stay there. To overcome this problem, it is proposed that the state government will have a separate recruitment policy for health facilities in tribal areas. This was also suggested in the NGO Consultation held in September 2003.

5.1.2. It is proposed to designate one Medical Officer in every General Hospital located in a tribal area as 'MO in charge of Tribal Health Care' in addition to their other duties. A monthly reporting format in the hospital will help this MO to track

tribal attendance at the facility and also further referral and follow-up for tertiary care. Access and utilization of health care at NGO / PHC / General Hospital by tribal populations will be reviewed on a monthly basis by the Joint Director of Health Services and on a quarterly basis at state level. It is expected that there will be enough data at the end of year 1 to link cause and effect of various tribal health problems and then plan mid-course interventions.

5.1.3. It is planned that every Medical College (Government and Private) will adopt one or more of the PHCs in the tribal areas of the district where they are located. The Department of Community Medicine will link with the PHC and assist in the following areas:

- i. Document and record referral for tertiary care and also follow-up after diagnosis and treatment.
- ii. Link with specialty departments in the Medical College so that tribal patients are not 'lost' within the Medical College.
- iii. Assist with special problems like sickle cell anemia, tuberculosis etc.,
- iv. Plan and carry out operational research (OR) that will provide critical input to the state government in planning tribal health policy. OR may be initiated only after due approval from the Directorate of Public Health and with appropriate ethical considerations.
- v. Consider two month rotations in PHCs in tribal areas for Postgraduate students in Community Medicine under the direction of the Senior Civil Surgeon in the PHC.

5.1.4. The Government of Tamil Nadu will consider an incentive package to encourage government doctors and Para health staff to serve in tribal and difficult areas. Some ideas include preference for post-graduate education and giving a posting of choice after a certain number of years of service in tribal areas etc. All incentive would be non-cash incentives.

Increasing Demand for Services

Public Private Partnerships

5.1.5. NGOs will be encouraged to appoint one locally trained tribal health worker at every PHC / General Hospital who will be paid a monthly honorarium. This tribal health worker (male or female) will interface between the public health service and the tribal population. He / she will assist the PHC / General Hospital to collect relevant data in a monthly format provided to him which will then be forwarded to the District Health Authority every month by the concerned NGO. He/she will also assist the PHC / General Hospital track referral of patients by these institutions for diagnosis and treatment and also follow-up those patients requiring special care. It is expected that this process will provide vital information on the health status and the health seeking behaviour of the tribal populations in the state.

5.1.6. The government will provide Mobile services in tribal area through reliable NGOs. The NGOs will be provided a vehicle and an annual recurring and a non-recurring budget per vehicle. The Mobile Services will include provision of emergency transport to appropriate health facilities when necessary and also Outreach services to provide regular health care through fixed travel circuits that will be planned by the NGO in consultation with the District Health Authority. The costing and the budget for these services will be on the same lines as prepared for the Ambulance services by the RCH Project.

5.1.7. NGOs can have a significant role to play in creating an enabling community environment, in the areas of building linkages, of strengthening capacities of community groups, training of CHWs and others. They can play a role in institutional strengthening of the district health system and in particular for participatory planning, joint monitoring and assessment, operations research and multi-sectoral coordination. More generally, NGOs have the ability and flexibility to develop integrated approaches and innovative programmes that can be scaled up when feasibility, effectiveness and efficiency have been demonstrated.

The government will support NGOs already working in tribal areas and with a proven track record with suitable grant-in-aid improve health care available to the tribals. This may be in the following areas:

- i. Out patient drugs for chronic diseases like diabetes, respiratory and cardiac problems – the actual quantity of drugs dispensed can be replaced from the nearest PHC / District Health Authority on a patient-wise request from the NGO. Accredited NGOs who are already receiving grants from the government can be provided drugs directly from the TNMSC as a portion of the grant.
- ii. Re-imbursal of special IP services that are provided by the NGO which are not available at the nearest Public Health Facility viz. Obstetric care, surgery, blood banking, etc. Rates of re-imbursement will be determined from time to time by the Government in consultation with the NGO.
- iii. Mobile emergency and Outreach services as detailed in 5.1.6.
- iv. The District Health Authority will ‘Outsource’ committed doctors and Para health staff from reliable local NGOs to fill up key vacancies in PHCs / HSCs where regular staff are not willing to serve.
- v. The state government will hand over very remote PHCs / HSCs in tribal areas to reliable local NGOs. The state government will re-imburse the usual recurring expenditure on salaries, consumables, drugs and logistics to the NGOs. The NGOs will be selected through the District level

Health Committee already present in the districts. These contractual personnel will be accountable to the District Health Authority through the contracting NGO.

- vi. The government will encourage and support NGOs to run a 'Tribal Clinic' within 10 General Hospitals located in tribal areas. Each Tribal Clinic would be staffed with one Medical Officer and One Assistant from the NGO. The NGO would also be provided a grant-in-aid to support the clinic in addition to the recurring expenditure of salaries. This clinic would link with the activities of the General Hospital described as per 5.1.2. for better care and support of the tribal population.
- vii. Training a cadre of tribal village health care workers similar to the ICMR cadre of Tribal Community Health workers to fill the gap between the village and the VHN and to provide skilled attendants for MCH care in difficult areas (Traditional Birth Attendants). She should be a local tribal woman, 5th – 10th standard pass, married, given 6 months training, may be part or full time and to look after about 2500 population. She is to be selected based on criteria suitable to the local population, trained, appointed, and paid an honorarium of Rs. 1000/- per month. A local NGO and the VHN/s of the Sub centre/s will jointly monitor her service activities. They are to be supported by visits of the local VHN fortnightly and by a physician once a month. She can be trained by existing ANM training schools or reputed NGOs. Besides RCH services, she can also refer patients for TB diagnosis, supervise TB Treatment, create awareness, help patients with special problems like sickle cell anemia and even look after maintenance of hand pumps and wells, safe storage of drinking water within the home, sanitation, health care of school children in the neighborhood and participate in the activities of other health programmes. A TBA is a health provider who has at least the minimum knowledge and skills to manage normal childbirth and provide basic (first line) emergency obstetric care. Not all of them can provide comprehensive emergency obstetric care although they should have the skills to diagnose when such interventions are required and the capacity to refer women to a higher level of care when needed. When things go well, the TBA avoids complications through clean and safe delivery, as well as providing the link to other services such as family planning and treatment of sexually transmitted infections. Due to their cultural and social acceptability, knowledge and experience, TBAs can be considered an

important ally for health education and social support and a positive link between women, families and communities and the formal health care system. It is important to remember that the TBA must be backed up by an effective health system.

- viii. Planned IEC in tribal areas to modify health seeking behaviour. The IEC will aim at providing information on the services available at various levels and motivating the tribals to utilize these services. The IEC activities would also focus on increasing community awareness about health and empowering them to identify their health needs, demand appropriate services and make the providers accountable for providing quality services. Communication approaches such as information, education and communication (IEC), social marketing, and behaviour change communication (BCC) represent systematic attempts to influence positively the health practices of a population. Their main goal in tribal populations should be to bring about improvements in health-related practices. The local non-tribal community has a particularly strong role to play in strengthening linkages with health services (financing and transport schemes), in increasing awareness of maternal and newborn health needs (community epidemiological surveillance, etc.) and in improving the quality of care (community involvement in quality). In these areas, increased knowledge of the non-tribal community results in increased action for health and increased participation in problem-solving to meet health needs of both the tribals and non-tribals in the area. As a first step to ensure community involvement and commitment, the project would organize a series of sensitization workshops, involving particularly the tribal leaders (village heads), traditional practitioners and other influential members of the community. The ultimate objective of the proposed IEC strategy will be to influence the health-seeking behaviour of tribals and orient them towards seeking safe and rational health care. It is imperative that the health providers themselves create this awareness and the dissemination of information would be done by the PHC MOs, and VHNs along with the NGOs.

5.1.8. The Tribal Residential Schools where almost 10% of the total tribal population is resident and available as a group will be one of the areas for planned intervention from the PHC. NGOs will also participate in this activity as part of their Mobile Outreach Services.

- a. Motivate and increase the number of tribal children in these schools.
- b. Special health plans for differing age groups in these schools.
- c. Special action for communicable diseases like TB
- d. Education curriculum to include hygiene and sanitation.

5.1.9. Tribal people approach their traditional healer, sometimes before approaching the public/private health system or during the period of treatment in longer illnesses. It is proposed that traditional healers are also involved in the provision of basic services at the community level. As an action research, the activity will be initiated by providing training to traditional healers / selected tribals in one tribal district as Tribal Health Workers. This activity would be undertaken in partnership with effective NGOs working in the field. The initiative would be evaluated at the end of a year, and after incorporating the feedback, would be implemented in the remaining tribal blocks. During the period of training, attempts can be made to document traditional tribal healing methods / system which are mostly an oral tradition - this could also be the focus of operational research.

Addressing Special Health Needs

5.1.10. It is planned to carry out a sample survey in all the tribal areas in the state to determine the prevalence of Sickle Cell Anemia in tribal populations. As the data available is limited to one district in the state, a mobile Sickle Unit will be developed at the Nilgiris-Wynaad Tribal Welfare Society in the Nilgiris District. The Project will be provided with an Electrophoresis Machine and a grant-in-aid package that includes support for one vehicle, accessory equipment, support drugs, and support for one lab technician and one senior paramedical worker. This unit will carry out a sample survey among all tribal populations in the state over a two year period. It will also, in association with other NGOs working with tribals, develop and evaluate a protocol for support and treatment of patients with sickle disease. This will include counseling. Great care will be taken to avoid stigmatization of patients with disease. It is also proposed to develop blood bank facilities in the Adivasi Hospital at Gudalur which can serve as a referral reference centre for seriously ill sickle patients requiring emergency transfusion services.

5.1.11. The data from the limited analysis in tribal areas indicates that tribals bear a disproportionate burden of malnutrition. It is increasingly clear that a small number of behaviors and nutrition practices aimed at addressing the immediate causes of malnutrition in women and young children have measurable impact on their health and nutritional status. Growth failure in children is concentrated into the first two years of life. Even in the poorest regions, on average, growth is normal after the age of two years. Thus, reduction of child malnutrition levels

depends on efforts aimed at the fetus and first two years after birth. Interventions to protect, promote, and support the following outcomes are affordable, relevant, and can be integrated into ongoing health services. They promote growth, reduce the severity of illnesses, and prevent death, disease and disabilities. Together they form a package of essential nutrition actions for the following priority outcomes—

- a. exclusive breastfeeding for at least six months;
- b. appropriate complementary feeding and continued breastfeeding for two years;
- c. adequate nutritional care during illness and severe malnutrition;
- d. adequate vitamin A intake;
- e. adequate iron intake; and
- f. adequate iodine intake.

In order to address this, the project would commission a special study in the first year of implementation to study the causes of malnutrition among tribals and develop a community-based intervention (? through the Self Help Groups in the districts) to address the problem. Data on height for weight and growth curves will be collected using the Tribal Health Workers posted in the PHCs / GHs. (described in 5.1.5). Intervention will be planned in convergence with the ICD Scheme.

In areas where malnutrition rates are very high the health program itself will benefit from an additional supplementary feeding or food distribution intervention. In addition to relieving serious food deficits in families, food mixes can improve nutrient density and provide essential nutrients missing in the family diet. The study must prescribe special measures, to adequately procure, store, prepare, distribute, and account for food supplies. To have an impact on improving nutrition, there must be a system in place to ensure that supplements reach those at risk of malnutrition and that the food is additional to and not just a replacement for family foods. Successful programs have strict inclusion and exclusion criteria (e.g., only children who are malnourished or have difficult family situations, or continue to falter in growth are enrolled); they often limit the duration of food distributed per family or child, and may include extra food to provide enough for mothers and all children in the family. Monthly or quarterly food distributions can also be used to attract mothers for other health services, such as immunizations, growth monitoring, deworming, and vitamin A supplementation. In some settings (e.g., ICDS Balavadi centers or outpatient facilities), supervised daily feeding may be possible.

5.1.12. The data presently being reported in the Revised National TB Control Program and the National Leprosy Eradication Programmes will be disaggregated in tribal areas with regards to case-finding, treatment compliance, defined outcomes, disability and continuance of care. A good disease surveillance system

at various levels can be linked to provide essential information to state health policy planners.

Reducing the Financial Burden of Health Care

5.2. There are various options for addressing the financial constraints to health care seeking. Firstly, women's self-help groups could be encouraged to act as intermediaries in purchasing group insurance policies (or low-cost individual/family insurance policies). Secondly, an analysis of the effective usage of resources already available for transportation in cases of obstetrical emergencies can be conducted. Based on the findings, attempts would be made to rectify the problems and increase the utilisation of these resources. Thirdly, community-based insurance needs to be studied and analysed further. Groups like the women's SHGs could either run their own health insurance policies, or purchase insurance from the insurance company. The community-based health insurance groups and women's SHGs could be used not only to address financial barriers to health care seeking, but could be provided with information about when and where to seek health care, thus addressing problems of lack of information and superstition.

Different studies from Africa and Asia reveal the need to strengthen the institutional, managerial, and administrative capacities of community organizations involved, as well as the importance of involving governments to establish a favourable legal, fiscal, and institutional context. The sustainability of these systems may sometimes be a limitation. Since these schemes are designed for people with very limited resources, reinsurance mechanisms supported by the State are needed. Also, these community-based efforts need to be linked to the larger social protection system.

The referral transport system and referral networking described in 5.1.6. should be strengthened. NGOs/self help groups/individuals may also be given the responsibility of arranging referral transport and the transport cost could be reimbursed. Self-help groups/individuals may volunteer to send the patient to FRUs/hospital. The referral linkage starting from the village level to the taluk level through a referral card system should be established.

Training/Capacity Building

5.3. All health workers should be aware of the importance of good communication, that good counselling is also a lifesaving skill, that intercultural and interpersonal competencies increase use of care, that communication and health education functions are not separate or less important than their more clinical functions. Training will be conducted at various levels and will include:

- a. **Medical Officers:** They will be provided a 2-3 days interactive orientation/Induction training programme on tribal values, beliefs, practices, and dialects. A module for this training will be developed in consultation with NGOs with experience of working in tribal areas and the training itself can be done by the Directorate of Public Health.
- b. **Hospital Para-medical Staff:** For male and female health workers and Pharmacists who are available at the PHCs and Sub centres and very often replace the doctors. This will be developed along the same lines as the training modules for the MOs.
- c. **Local Village Leaders / Panchayat leaders:** They will be sensitized to support the PHC Committees and also link with local NGOs and the tribal community in referral and follow-up of patients.

5.4.1. Monitoring and Evaluation

A Tribal Health Monitoring Cell will be created at state level in the Directorate of Public Health. This cell will consist of one Statistical Officer and one Data Entry Operator. They will be provided with a computer, telephone and electronic connectivity. All the district level data that will be collected through the channels described earlier in 5.1.5. and 5.1.2. will be collated and analysed. This will assist the state government in periodically reviewing the progress and impact of this Tribal Health Intervention.

Regular monitoring of activities under Tribal Development Plan would be undertaken. The Medical Officer in charge of Tribal Health Care at the Taluk General Hospital may be given the additional responsibility of monitoring the same (e.g. pediatrician will monitor the immunization programme). Some of the indicators to be used for this purpose include:

Key Indicators	Source
Increase in total outpatient attendance of tribals in health facilities	HMIS
Increase in the proportion of all attendees who are tribals	HMIS
Increase in the proportion of facilities in tribal areas providing the defined services	HMIS
Increase in the number of referrals from PHCs in tribal areas to the secondary level	HMIS
Increase in the number of referrals from PHCs in tribal areas to the tertiary level	HMIS
Increase in awareness among tribals of public health services and government schemes	Annual survey
Increase in the awareness amongst doctors and nurses in tribal areas of the referral system	Annual survey
Increase in the number of facilities in tribal areas contracting out non-clinical services	HMIS
Increase in satisfaction among tribals with the services being offered at secondary facilities	Annual patient satisfaction survey
Increase in the number of tribal women benefiting from the transport scheme	HMIS
Increase in the number of women availing of assisted birth	HMIS

5.4.2. State level. A state level committee for Tribal Health would be formed. This committee would have representatives from the Directorate of Tribal Welfare, Directorate of Public Health, Directorate of Medical Services, Directorate of Family Welfare, Education, Rural Development and Panchayati Raj, Civil Supplies and reputed NGOs. The committee will provide and suggest policy guidelines, approve state plans, proposals based on the micro-plan, finance, review, monitor and evaluate the programme at the state level. The State level implementing authority will be the Director, Family Welfare/RCH.

5.4.3. District level coordination committee. The *District coordination committee* would be a part of the existing district health society under the chairmanship of the District Collector. One identified /designated officer under the JDHS is to look after planning, implementation and monitoring. Institutional back up with existing staff will be provided.

5.4.4. The Plan provides for an Impact study to be conducted in the latter part of the third plan year to evaluate the proposed interventions. The study design and protocol will be finalized in consultation with NGOs working with the Programme.

5.5. Operations Research. The Plan provides for two Fellowships every year for Post graduate students in Social Sciences and Public Health as well as Medical Graduates for conducting operational research among tribal populations as per guidelines laid down by the state government from time to time. Some areas that could be studied include

- a. Study the effectiveness of mobile health services and develop a plan to expand the same.
- b. Alternative strategies to improve accessibility and utilization of health/RCH services in tribal areas.
- c. Improving skilled attendance in MCH care with special reference to deliveries.
- d. Nutritional status of tribals, and plan for addressing the issue of malnutrition.
- e. Innovative approaches for better inter-sectoral coordination, and convergence.
- f. Extent of use and effectiveness of traditional medicine
- g. Appropriate referral linkage and transport in tribal areas.

6.0. Costing for Tribal Development Plan

The total cost for the Tribal Development Plan is Rs.9,00,78,500.00
The Working sheet follows.