

**REHABILITATION OF SHIFTING CULTIVATORS
OF
EASTERN GHATS OF NORTHERN COASTAL DISTRICTS
ANDHRA PRADESH**

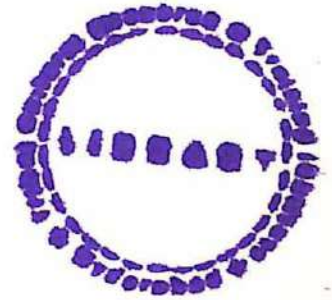
PROJECT REPORT

**TRIBAL WELFARE DEPARTMENT
GOVERNMENT OF ANDHRA PRADESH
HYDERABAD.**

OCTOBER 1988

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R-178



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P R E F A C E

✓ The Project on Rehabilitation of Shifting Cultivators of Eastern Ghats of Northern Coastal Districts of Andhra Pradesh is prepared to seek financial assistance from IFAD (International Fund for Agriculture Development). The main aim of the project is to wean away shifting cultivators from the wasteful practice and introduce them to sedentary productive activity by improving their dry and wet land practices besides affording them a package of marketing and processing industrial activity with the ultimate objective of improving the economic and ecological base of the Podu cultivators and their area of habitation. As a concomitant measure, the Project also aims at improving the quality of life of shifting cultivators by reducing illiteracy and fighting malnutrition and disease by providing improved educational, nutritional and health care facilities besides a net work of roads and housing.

The preparation of the Project Report is preceded by a socio-economic survey of selected Podu villages, the results of which are ploughed back to Project formulation. The Socio-economic survey was conducted by the Regional Centre,*TCR & TI., Paderu, Visakhapatnam District.

✓ The Project formulation with a ten year perspective is based on clear identification of the Podu area, its resource endowment and ways of life of tribes practising Podu cultivation. The strategy Centres round identification of Watersheds and providing inputs and services suited to natural and human ecologies of the area.

A committee is constituted for the preparation of Project Report with the following Officers.

Sarvasri

1. T. Vijayakumar, IAS.
Project Officer, ITDA, Rampachodavaram,
East Godavari Dist.
2. Dr. Uma Malleswar Rao, M.Sc., Ph.D.,
Project Officer, ITDA., Paderu,
Visakhapatnam Dist.
3. L.V. Subrahmanyam, IAS.
Project Officer, ITDA., Parvathipuram,
Vizianagaram Dist.

* Tribal Cultural Research & Training Institute

4. D.R.K. Sarma, M.Sc.,
Project Officer, ITDA., Seethampeta,
Srikakulam Dist.
5. Dr. A Somasekhar, M.A., Ph.D.,
Joint Director, Regional Centre,
TCR & TI, Paderu,
Visakhapatnam Dist.
6. V.M. Prasad,
Officer on Special Duty,
Girijan Coop. Coffee Development Corporation,
Visakhapatnam. Convenor

The identification of the Project Action Area, scheme formulation and processing of data at field level was done by the project officers of four ITDAs., Rampachodavaram (East Godavari Dist.), Paderu (Visakhapatnam Dist.), Parvathipuram (Vizianagaram Dist.,) and Seethampeta (Srikakulam Dist.). The Project formulation, spread over four months, has been conducted by holding series of Appraisal and Review meetings with the Project Officers by the Director of Tribal Welfare and Director, TCR & TI., Hyderabad. The necessary research and statistical logistics are provided by the Staff of Tribal Cultural Research & Training Institute who are also responsible for the preparation of the final Project Report.

The Project Report is divided into two parts. Part I comprises the introductory chapters describing the Habitat and people besides the findings of the Socio-Economic Survey. Part II sets out the strategy, project components, management and financial resources.

HYDERABAD
25th October '88.

M.V.P.C. SASTRY, IAS.
Director, Tribal Welfare,
Govt. of A.P.

ANDHRA PRADESH



- | No. | DISTRICT |
|-----|---------------|
| 1 | SRIKAKULAM |
| 2 | VIZIANAGARAM |
| 3 | VISAKHAPATNAM |
| 4 | EAST GODAVARI |
| 5 | WEST GODAVARI |
| 6 | KRISHNA |
| 7 | GUNTUR |
| 8 | PRAKASHAM |
| 9 | NELLORE |
| 10 | CHITTOOR |
| 11 | CUDDAPAH |
| 12 | ANANTHAPUR |
| 13 | KURNOOL |
| 14 | MAHABUBNAGAR |
| 15 | HYDERABAD |
| 16 | RANGAREDDY |
| 17 | NALGONDA |
| 18 | KHAMMAM |
| 19 | WARANGAL |
| 20 | KARIMNAGAR |
| 21 | ADILABAD |
| 22 | NIZAMABAD |
| 23 | MEDAK |

PART I

HABITAT AND PEOPLE

INDIA has the largest tribal concentration in the world, next only to Africa. Scheduled Tribes* occupy a significant place in India's ethnic structure enjoying constitutional protection and privileges. They constitute 7.85% (53.8 millions) to total population in the country as per 1981 census. The Scheduled Tribes numbering over 250 and speaking over 100 languages and dialects have their own socio-cultural and ecological milieu. They are mostly dwellers of forests, hilly regions, which are usually inaccessible. They are concentrated mostly in Central India (32.7 millions) in the States of Orissa, Bihar, Madhya Pradesh, Andhra Pradesh and Maharashtra.

Andhra Pradesh has the largest concentration of tribal population in Southern India. There are 33 Scheduled Tribes in the State with a population of 31.76 lakhs (3.176 millions). The Scheduled area, the main habitat of tribals, extending over 30.030 Sq. Kms. is distributed in Srikakulam, Vizianagaram, Vishakapatnam, East Godavari, West Godavari, Khammam, Warangal, Adilabad and Mahboobnagar districts. The Scheduled area constitutes 11% of the total geographical area of the State. The Scheduled Tribe population in the State constitutes 5.93% to the total population of the State. The tribe-wise (Scheduled Tribe) population is given in Annexure-I. The density of population in tribal areas is 125 per Sq. Km. as against 194 in the plain areas. The district-wise Scheduled Tribe population (1981 Census) is furnished in Annexure-II. The literacy rate of Scheduled Tribes in Andhra Pradesh is only 7.84% and it is not even half of the National literacy level of Scheduled Tribes (16.35%) as per 1981 Census.

*Concepts and Terms used in this Project Report are explained at the end.

On the basis of Geo-cultural characteristics, the Tribal areas of Andhra Pradesh can be divided into five regions:

1. Gond-Kolam Region : Tribal areas of Adilabad Dist.
2. Koya-Konda Reddi Region : Tribal areas of Karimnagar, Warangal, Khammam, West-Godavari & East Godavari districts - Areas along Godavari gorges.
3. Khond-Savara Region : Tribal areas of Visakhapatnam, Vizianagaram and Srikakulam districts.
4. Chenchu Region : Tribal areas of Mahboobnagar, Nalgonda, Kurnool, Prakasham, and Guntur districts.
5. Plain areas : Areas of habitation of Yanadis, Yerukulas and Banjaras.

The action areas of this Podu Rehabilitation Project form part of Khond-Savara Region and East Godavari, part of Koya-Konda Reddi Region. The Khond-Savara Region is one of the typical tribal habitats comprising of forest and hill tracts which form part of the Great Eastern Ghats.

Winter is extremely cold in this region and summer is pleasant with salubrious climate in certain areas like Araku and Paderu in Visakhapatnam District. Important rivers such as Nagavali, Vamsadhara, Suvarnamukhi, Vegavati, Mahendratana, Gomukhi, Champavati and Machkund, meander through the tribal areas of this region. The Machkund river profoundly influenced the socio-religious lives of tribals of Paderu region. The major tribal groups of this region are Savaras, Jatapus, Bhagatas, Valmikis, Khonds, Nookadoras, Konda Doras, Gadabas and Porjas.

In East Godavari District, Podu rehabilitation Project falls in Koya-Konda Reddi region. The major tribal groups of this region are Koyas and Konda Reddis and they are found all along on either side of the river Godavari and its tribu-

stories like Sabari and Kinnerasani. The mighty Godavari greatly influenced the Socio-economic conditions of Koyas and Konda Reddis.

In the action area, about 23 tribal communities are found with a total population of 5.77 lakhs (0.577 millions). The details of Tribal population in this region are given below :

(in millions)

Sl. No.	Name of the District	Scheduled area in Sq. Kms.	Total Population in the Sub-plan area	ST Population in the Sub-plan area	% of ST population
1.	Srikakulam	1,289.32	0.086	0.043	50.0
2.	Vizianagaram	1,740.98	0.136	0.097	71.3
3.	Visakhapatnam	5,904.51	0.355	0.316	87.8
4.	East Godavari	4,191.65	0.174	0.121	64.9
Total		13,126.46	0.751	0.577	76.8

In these four districts, Integrated Tribal Development Agencies have been functioning since Fifth Five Year Plan. The details of lowest level administrative and development units ie. Mandals located in each I.T.D.A. are given here-under :

I.T.D.A./ District	No. of Mandals			Villages		
	Wholly situated in ITDA area	Partly situated in ITDA area	Total	Scheduled	Non-scheduled	Total
1	2	3	4	5	6	7
Seethampeta Srikakulam	1	14	15	108	239	347
Parvathipuram, Vizianagaram	2	6	8	298	133	431
Paderu Visakhapatnam	11	6	17	3368	86	3454
Rampachodavaram East Godavari	7	6	13	559	40	599
Total	21	32	53	4333	498	4831

Natural Resource Base:

The Eastern Ghats in Andhra Pradesh are divisible into two sub-zones viz., Northern Sub-Zone and Southern Sub-Zone. The Action Area falls within the Northern sub-zone which consists of hilly areas of Godavari, Sileru, Machkund basins and covers the Districts of Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari. The Northern Sub-Zone has rich and dense forest resources with fertile soils and high rainfall ideally suited for afforestation. The vegetative growth in this Sub-zone consists of moist deciduous and superior dry deciduous forest types. These forests form a resource base with great potential for exploration, conservation and scientific exploitation. The Eastern Ghats lying in Northern Sub-Zone are the main sources of watersheds of important river-valley catchments.

Geo-climatic Variables:

The hill ranges vary in height from 200 metres to 1800 metres. The tribal areas from East Godavari to Srikakulam which form part of the Northern Sub-zone of Eastern Ghats present variegated landscape, ranging from intensive wide plains to rolling hill ranges of the hills clothed in dense vegetation and valleys chequered with fields, alternate with ridges.

The areas where shifting cultivation is practised have steeper slopes of above 28.5 degrees. As tree growth on these steep slopes is cleared for shifting cultivation, resultantly the rain water washes away the rich upper layer quickly; rendering the land unfit for cultivation within two to three years besides silting up rivers when the rain water drains off into the rivers.

Geology:

The zone consists largely of Sillimanite schists with intrusions of Charnokite gneisses; the younger rocks include granites, anorthosites and nepheline syenites. Geologically, there is said to be a "cross folding" in the rock formation.

Minerals:

Minerals of economic value such as manganese, bauxite, apatite, graphite, chromite, magnetite, sillimanite, worfromite and corundum besides gold, coal, bergal are located in different places. The occurrences of crystalline limestone is found near Borra caves situated in Ananthagiri Mandal of Paderu I.T.D.A. in Visakhapatnam District. This could be utilised in glass manufacturing and for making mild abrasives for polishing metallic surfaces. Red Ochre is found at about 6 furlongs to the west of Sarai village of Srungavarapu Kota in Visakhapatnam District. This is useful in paint manufacturing.

Iron ore in the form of magnetite occurs along with apatite near Killamkota area of Visakhapatnam District. The ore is a high grade massive containing 69% of iron. Huge Bauxite deposits have been discovered in the Eastern Ghats of Ananthagiri Block. There are three main cappings of aluminium laterite in this area. These bauxite cappings occur over an altitude of 1300-1400 M. above M.S.L. These deposits are expected to carry large reserves of high grade bauxite suitable for aluminium, as well as for use in steel, refractory, abrasive and other industries.

In Agency tracts of East Godavari District, an extensive capping of aluminous laterite containing good quality bauxite has been discovered by the Geological Survey of India in Dummakonda hill range and in the interior hills around Maredumilli of East Godavari District. This is used in steel, Chemical and other Industries. Graphite deposits and sand stones

available in agency tracts are useful for building materials. Plastic with clay and fire clays found in the Project area are suitable for ceramic and other industries. The mineral wealth in Srikakulam and Vizianagaram agency tract consists of Manganese, Limestone, Quartz and Graphite.

Soils:

Due to the mountainous nature with high slopes, specific soil formations with characteristic profiles are rare. Laterite soils (Oxisols) and red soils (alfisols) are the most prominent types. Clay and silt deposition occurs in the valleys.

Climate:

The climate of this region is sub-humid, with the maximum temperature in winter touching 4-5 degrees C., but temperature in summer is fairly high being 30-35 degrees C. even at higher elevations. The rainfall ranges from about 100-150 Cms., a major part of which is received by South-West monsoon and relatively less by North-East monsoon.

Forest and Vegetation :

The common trees found in these areas are:

1. Bamboo (*Dendrocalamus strictus*)
2. Tamarind (*Tamarindus Indica*)
3. Acacia (*Acacia leucophloea*)
4. Medick (*Morinda Tinctoria*)
5. Jamun (*Eugenia Jambolana*)
6. Yegi (*Pterocarpus Marsupium*)
7. Nalla Maddi (*Terminalia Tomentosa*)
8. Jack Fruit (*Artocarpus Integrifolia*)
9. Eucalyptus (*Eucalyptus species*)
10. Mango (*Mangifera Indica*)



11. Teak (*Tectona grandis*)
12. Mohwa (*Bassia Latifolia*)
13. Caryota Palm tree
14. Soap-nut (*Sapindus emarginatus*)

Extensive plantations of Teak and Bamboo are undertaken by different Government agencies particularly the Forest Department. Coffee has been introduced as a Commercial plantation.

Water Resources:

There are about 30 major and minor watersheds in the zone, with an average drainage ranging from 200 to 600 mm. and commanding catchments ranging from 500 to 10,000 Sq. Kms. The mean drainage density is about 0.07 Sq. Km. of stream of river flow. Except for direct use of stream water for terraced plots along the bed, there are few dams and reservoirs on the streams or rivers, except on 4 to 5 bigger rivers. Ground water exploitation is very meagre.

Minor Forest Produce:

The forests in coastal districts are potentially rich and varied. Items like 'Adda' (*Buϕhanie Vahuli*) leaf, Tamarind (*Tamarindus Indica*), Myrobalam, Broom-stick, Soapnuts, Marking nuts, Pungam seed, Nux Vomica, *Raulfia Serpentina* roots are abundantly available in this region.

Land use:

The land use pattern of Action Area shows that out of 1.2993 million hectares of geographical area the forest constitute 0.8107 million hec. (62.39%). The net area sown constitutes 0.1751 m. hec. (13.48%). The cultivable waste accounts for 0.0503 million hectares (3.88%). The land use details for the 4 I.T.D.A.s are furnished in Annexure-III.

Settlement Pattern:

The settlement pattern of tribals living in Eastern Ghats differs from one region to another. The Konda Reddi and Koya settlement pattern is definitely an adaptation to their method of food production. Two types of settlements have been found among the Konda Reddis. The first consists of small hamlets on mountain slopes and the second consists of larger villages situated on the basin of river Godavari or in the valleys and foot hills. The former settlements are those of shifting cultivators

while the latter belong to settled cultivators. Most of the hill settlements of Konda Reddis are very small consisting of about 10 houses. These houses either perch in a cluster on hill slope or huddled in a jungle clearing. The settlements of Savara, Khond, Valmiki and Bagata are generally located on elevated places or hill slopes overlooking their agricultural fields. The long houses of Savaras and Khonds are divided into portions and each portion is occupied by a single family. A settlement consists of two or three parallel rows of linear huts. The other tribal groups have single houses of square or rectangular types living in larger multi-tribal villages either in foot hill area or nearer to plains areas.

Social Pyramid:

The social pyramid of the tribals of the area could be broadly divided into three strata taking into consideration their commensal patterns and the prevailing concepts of relative community social status. Bagatas, Nooka Doras and Kotiyas occupy the highest stratum of the social pyramid as eating beef is tabooed among these tribal groups. These tribal groups constitute non-beef^{eating} communities. The next stratum consists of beef and pork eating tribal groups like Konda Doras, Porjas, Gadabas and Khonds, while Valmikis belong to the lowest social stratum because of their trade in skins and hides. The tribal groups can also be classified into high and low status groups based upon the customs of acceptance of cooked food and other prevalent and generally accepted traditional concepts of status criteria. Bagatas occupy the highest step of the social pyramid followed by Nooka Doras and Kotiyas respectively in the hierarchical order of the first stratum. In spite of this structural hierarchy, these communities also follow certain egalitarian principles. The stigma of untouchability is unknown in Tribal areas. They enter into ceremonial friendship irrespective of high or low status tribe or sex. They jointly participate in village festivals and rituals.

Family:

Family constitutes the fundamental unit of the social structure of the various tribal groups. In general, immediately after marriage a son or brother establishes a separate family and as such most of the families are predominantly of nuclear type only. Joint families are also met with in a number of cases.

A tribal family is characterised by patrilocal residence, patrilineal descent and patriarchal authority.

Totemic Clans :

Most of the tribal societies living in Eastern ghats are divided into several exogamous clans. But Savaras inhabiting in hilly areas of Srikakulam and Vizianagaram districts originally are not having clans. However, some sections of Savaras are adopting the following clans of Jatapus - an advanced section of Khonds.

1. Arika (small millets)
2. Biddika (earthen pot)
3. Kumbinika (a kind of tree)
4. Gedala (Buffalo)
5. Konda Gorri (wild sheep)
6. Addakula
7. Mutaka (Moduga tree)

The tribal groups living in Visakhapatnam district are organised on the basis of the following totemic clans:

1. Korra (Sun)
2. Pangi (kite)
3. Ontala (snake)
4. Killo (tiger)
5. Gollori (monkey)
6. Kimudu (bear)
7. Matya (fish)
8. Chelli (goat)

The clan organisation of the tribal groups of Srikakulam, Vizianagaram and Visakhapatnam Districts is more or less based on the principle of 'fubier' i.e. adopting the clan structure of dominant tribal group. But, the tribal groups of East Godavari viz. Konda Reddi, Koya, Valmiki, possess more or less independent clans. The Koya society is based on totemic clans, such as Murram (tortoise), Turam (a cat family), Kurasam (wild goat) Madakam (a kind of fish). The Konda Reddy and Valmiki groups are organised on the basis of surnames (septs) like any other Telugu-speaking caste and communities.

Among the tribal communities of Eastern Ghats, various ways of acquiring mates are found. Marriage by negotiations, marriage by service, marriage by capture, marriage by elopement are some of the important types of acquiring mates. The bridegroom has to pay bride-price in all tribal communities. The entire marriage expenditure has to be borne by the groom's party only.

The religion of the tribal communities of Eastern ghats is a mixture of Animism and Hinduism. Now a days, they are celebrating a few Hindu festivals like Dasara, Deepavali, Sriramanavami, etc. Their traditional religious rituals and ceremonies are connected to their economic activity. For example, Vittupanduga, a festival celebrated by Savara, Gadaba, Valmiki, Khond Tribals is connected with their hunting. The festivals like Nandipanduga, Korra-Kothapanduga, Bhoomi panduga, etc. are connected with their agricultural activity. The Koyas worship deities like Kommadamma, Kateredu, and Adamraju.

The tribes men of Eastern ghats celebrate certain rituals for proper growth of crop and to protect it from pests and other natural calamities. For timely rains also, they propitiate Bheema, the second among the Great Pandava brothers. The Savaras sacrifice a buffalo, if they are adversely affected by incessant rains.

The tribals of this area strictly observe the practice of propitiating the Gods before consuming the first fruit or grain harvested. Without performing the ceremony/rites, consumption of the fruits/crops is prohibited.

Economic organisation :

In Central and Northern parts of Eastern ghats, Jatapus, Konda Reddis, Savaras, Porjas, Konda Doras and Khonds subsist mainly on agricultural activity and most of them depend on Podu cultivation. Besides Podu, they also raise horticultural crops. Their main activity is supplemented by food gathering and collection and sale of minor forest produce. The material equipment of all these communities consists of simple tools bow and arrow for hunting, digging stick, 'Konki boriga', hoe and sickle are used in agricultural activity.

Women and children play a vital role in the economic activity of the tribal household. Women participate in every economic activity particularly in agriculture (except ploughing) and non-agricultural activities. They freely accept wage labour when opportunities are available besides collecting forest

produce. The tribal children from 10th year onwards help their parents in family pursuits by tending cattle, weeding fields, chasing birds on the standing crops, etc. When the parents are engaged in their family occupation, the younger children are left to the care of the elder children usually girls.

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SHIFTING CULTIVATION

Even though dress, decoration, political structure and behaviour patterns of Tribals in this State are undergoing rapid changes due to long standing and increased contact with the general population, their agricultural practices and other methods of exploiting nature remained relatively un-changed. Both advanced and primitive tribal groups still subsist on 'Podu' cultivation. In the tribal areas of this State especially in the hilly and forest region of Srikakulam, Vizianagaram, Visakhapatnam and East Godavari, there are small but innumerable problem areas where the tribals practice shifting cultivation which is locally known as 'Podu'. The shifting cultivators are at subsistence level, that is at a level where every family must produce whatever is required for consumption.

Two types of 'Podu', namely 'Chelaka Podu' and 'Konda Podu' are in vogue. While the podu practised in plain jungle clearance and flat lands is known as 'Chelaka Podu', the Podu confined to hill slopes is called 'Konda Podu'. Both the types involve shifting of cultivation site from one patch to another after the fertility of the patch is exhausted. The cycle of shifting is determined by agro climatic conditions locally prevailing. In Konda Podu primitive implements like hoe, digging stick hand axe and sickles are used, for 'Chelaka Podu' the implements employed by the settled cultivators are used. 'Konda Podu' operations start with the onset of summer to the accompaniment of certain rituals. After selecting a patch of land

the trees and bushy growth are cleared and allowed to dry. Before the onset of monsoon this is burnt. This process marginally increases the fertility.

Podu cultivation essentially provides the bare requirement of tribals for survival rather than generating surplus and profit, nevertheless, it plays a vital role in the economy of certain tribal groups as it ensures food supply almost round the year. Over the ages it has become an inalienable part of their life and culture with a number of ceremonies built around it.

Podu location and Extent :

The study reveals that out of 479 tribal families in the sample villages, 434 are entirely or partially depending on Podu land constituting 90.60% to the total families. An extent of 541.50 hectares of Podu land is owned by these 434 families. The average size of Podu holding per family works out to 1.25 hectares. Again out of the total land of 541.50 hectares of Podu land, an extent of 492.20 hectares come under unreserve forest while the remaining 49.30 hectares of land is in the Reserve forest (Annexure-IV)

Earlier, the tribal used to cultivate a Podu patch for a period of two to three years, abandon it permanently and then used to go for a new patch of Podu Land. Gradually, due to the restrictions imposed by the Government and also growth of population, the tribal had to confine to a limited number of Podu patches in which he is shifting from one patch to another. This practice is noticed in all the sample villages of Visakhapatnam, Vizianagaram and Srikakulam districts. In East Godavari district, it is found that Kondareddis who

are inhabiting the two sample villages, Viz., Chekkavad and Boddagondi are still going for fresh patch as restrictions imposed by Forest Department are not rigorously applied. Besides as long as a tribal resides in that particular village he has a right to re-occupy the land last cultivated by him and would not be contested by any other villager. It is believed that the Podu fields become unsuitable for cultivation due to loss of fertility after raising crops for three years successively. If sufficient Podu land is not available then shifting does not take place. For instance, in Bauyaguda village of Visakhapatnam district Khonds are continuously cultivating the Podu land without leaving ^{it} fallow by applying farm yard manure as there is scarcity of Podu land. In Kondamusuru village of Vizianagaram district, the Kondadoras are extending their Podu cultivation beyond the three year cycle ^{by} applying Farm yard manure.

The tribals are very careful in choosing the location of the land to be cultivated. They have to rely on their knowledge of the local vegetation in selecting the site as an indicator of the fertility of the soil. The tribals interviewed expressed the view that any species of tree, bush, shrub with thick leaves indicates fertility of Podu land. Experience and oral tradition directs the farmer to the soils that are more fertile, easiest to cultivate or best suited for raising crop. His index of returning fertility after a fallow period, is based on the succession of the vegetation that followed cultivation. While selecting site, shifting cultivators consider not only the physical characteristics of the site but also its distance from their habitation.

Most of the hilly areas are very thinly populated and the villages/hamlets are situated far apart. Each village operates in a particular demarcated area. It is observed during the field study that Savaras and Jatapus in Seedhi village of Srikakulam district have separate demarcated

areas, though they are living in the same village. Savaras exclusively undertake Podu cultivation on two hills called Dasari Kond and Pedamma konda while Jatapus cultivate Raimanukonda and Puddikonda. Apart from these both these groups share two other hills ie. itchingalukonda and Athakarikonda with clear demarcation between the two groups. In Gudamaliputta of Visakhapatnam district, it is noticed that there is no demarcation of area for undertaking podu cultivation among the inhabitants viz., Malis, Valmikis and Kondakammara on a group basis, however, no disputes are noticed in the sample villages with regard to jurisdiction of Podu area as individual ownership of Podu land is recognised. Each Podu cultivator has a traditional right over a particular Podu land. Some of the tribals in the sample villages have got pattas also or the Podu land situated in un-reserve forest. It can be seen from Annexure V that out of the total extent of 541.50 hectares of Podu land in the selected villages, pattas were given covering an extent of 116.437 hectares constituting 21.50% of the total Podu land. It is interesting to note that out of the total 434 Podu land holders in the sample villages, 324 inherited 418.437 hectares (77.27%) of Podu land from their forefathers while the remaining 123.060 hectares of Podu land (22.73%) was cleared by the remaining 110 Podu families (Annexure VI). It indicates that there is little scope for increase in the extent of Podu land. Transfer and sale of Podu land is not reported. Neither traditional tribal leaders nor village councils have any special privileges with regard to Podu lands in this case.

Method of Podu Cultivation :

After the selection of land, the tribal starts clearing the bushes with knife called 'Chinnakathi' on an auspicious day in consultation with 'Disari' or 'Muhurthagadu', local priest. the tribals offer a fowl or coconut on

this day to propitiate the Gods or ancestral spirits. All the family members participate in this activity. They cut off trees and under growth with the help of axe and sickle. As this involves lot of manual labour, they start this operation with the onset of summer. They leave the cut down trees and bushes to dry. If there are big trees which cannot be removed by them they dig holes around the roots of the trees and lit fire at the bottom of the trunk. The tree witheres in a week and slowly falls on the ground. When all the bushes that have been cleared get dried by the end of April or middle of May, the tribal burns them and spreads the ashes over the fields. A tribal ordinarily clears $\frac{1}{2}$ to 1 hectare for Podu. During first year of Podu cultivation the communal labour helps him for preparation of land. When the monsoon is about to set in during the month of June, the tribal prepares the land for cultivation. He uses a hoe or digging stick for raking the land.

When monsoon sets in, the tribal starts broadcasting or dibbling small millets and pulses in the ashes of the burnt trees and bushwood. Pulses like redgram, blackgram, greengram are dibbled, while small millets such as Sama, Ganti and cereals like Jowar are broadcast. After one or two rains, these seeds germinate and within 15-20 days the whole field looks like a green carpet. Weeding operations are carried out twice in an agricultural year. Some times it becomes essential to carry them out thrice in a year if the weeds grow faster and in plenty. The depredation by wild animals and pests starts from the days when the ears of the crops appear and continue till the harvest. The villagers have to watch day and night when the crops are ready for harvest for which they construct a farm 'Machan' or hut in the field. Now and then the tribal beats empty tin with a stick to scare away wild animals or birds that destroy the crop. They do not use either fertiliser or pesticides.

Harvesting starts in the month of October and continues till December. Varieties of crops are sown with different timings to ensure food supply on continual basis. After threshing operations are over the food grains are collected and stored in baskets for future consumption. The baskets are made of bamboo reeds and in different sizes. All the tribal groups except Jatapus keep these bamboo baskets on the attick, whereas Jatapus keep them on an elevated platform of the house. They sell the commercial crops like Niger, Turmeric, etc. after harvesting.

Simple tools and implements and locally produced seeds are the main inputs of shifting cultivation. The agricultural implements used for Podu cultivation are Kathi (Knife), 2. Kodavali (Sickl), 3. Gunapam (Crobar), 4. Para (Shovel) and 5, Goddali (Axe).

A large variety of crops like 'Sama', 'Chodi', 'Sirikandulu' 'Korralu', 'Jonnalu', 'Maize', 'Ganti', 'Dellies', 'Timmerlu', 'Niger', 'Tamatamas', 'Dry Paddy', 'Judumulu', 'Oodalu', 'Castor', etc. are grown on Podu lands. Podu cultivation has very little scope for mono cropping as diverse crops are sown in a single plot of land. In most of the podu patches mixed crops are grown. While in a few patches single crops are raised due to specific reasons. For instance 'Tomatamalu' (a variety of pulse) is a small plant and requires direct sun light for growth. It is therefore grown as a single crop separately. Similarly, crops like 'Thimmerlu' and 'Dellies' are creepers and hence they are being raised as separate crops. The cropping pattern varies from region to region. In Srikakulam and Vizianagaram districts they raise redgram only in the first year and in the subsequent years they raise mixed crops like 'Sama', 'Gante', 'Jonna', 'Korra', 'Judumulu', 'Oodalu', Redgram and 'Chodi', etc. The combination of these mixed crops varies from village to village. In Visakhapatnam district the tribals cultivate

crops like 'Sama', 'Chodi', 'Korra', 'jonna', 'Ganti', Maize, Castor, Gingelly, with different combinations; while the crops like 'Dellies', 'Thimmerlu', 'Tamamatolu', 'Vulavalu', are grown separately. The Tribals of East Godavari district raise crops viz., 'Ragi', Jowar, Maize, 'Samai', 'Bajra', 'Redgram', Castor, blackgram, etc. as mixed crops in their Podu fields. Apart from these crops the tribals cultivate many kinds of vegetables and tubers in the Podu lands. In Podu cultivation the primary emphasis is given to food crops, which are meant for home consumption. Besides food crops, commercial crops are also grown to meet their daily requirements. The mixed cropping pattern has certain advantages as observed in the field and these are :

1. Combination of certain crops results in low incidence of pest attack.
2. Food supply throughout the year is ensured.
3. Mixed crops serve as a guard against total crop failure as one or the other crop survives providing the much needed food.

Podu is a practice which has persisted over ages. It is a way of life developed as a reflex to the peculiar geophysical environment of the tribal.

PODU CEREMONIES

Tribals observe various ceremonies and rituals and propitiate numerous deities associated with Podu cultivation. Among the tribal groups various religious functionaries play an important role while performing these ceremonies. The most important religious functionaries with their specific roles in the ceremonies associated with Podu cultivation are discussed hereunder:

1. **Disari :** He is the most important of the functionaries in the religious ceremonies of many of the tribals in the Eastern ghats of Andhra Pradesh. He also fixes auspicious time for the social and religious ceremonies performed by tribals including ceremonies associated with Podu cultivation.
2. **'Pejjeni' or 'Pejjeni buddi' :** The Pejjeni is a married old woman or widow who attends to various rites of Khonds. She is believed to have the power to communion with the spirits. Thus she acts as a spirit medium. Similar female religious functionary called 'Kudan boi' officiates various religious and social ceremonies among savaras.
3. **Tromba :** He is an young unmarried man who acts as a priest for certain festivals of Khonds.
4. **'Buyya' :** Headman of a Savara village who fixes the day for celebrating the festivals among Savaras.
5. **'Kudan' :** Male Religious functionary of the Savaras who officiates social ceremonies. His counterpart among females in "Kudan boi" who also acts a spirit medium.

The tribal consults 'Disari' to fix an auspicious day for clearing a fresh podu patch by offering one bottle of 'Ippasara' or Mohua liquor. 'Disari' drinks the liquor and fixes an auspicious day for clearing Podu. This practice is in vogue in the surveyed tribal communities of Khond, Savara, Porja,

Jatapu and Goudu.

During the regime of 'Muttadars' (feudatory functionaries created by the British), the tribals were taking consent of the concerned 'Muttadar' for cultivating the Podu patches by offering one fowl, a 'Kuncham' (Local measure) of rice, one pumpkin, plantains and Rs. 20/- on Dasara festival day in addition to ploughing the lands of 'Muttadar' free of wages. The 'Muttadari' system has since been abolished. In Visakhapatnam district, Goudus consult 'Disari' for an auspicious day for clearing the Podu patch and on that day the head of the family goes to the Podu field, selects one stone in a corner of the field, decorates the spot before the stone with 'Chodi' powder, applies turmeric and vermilion to the stone selected and after sprinkling the rice before the stone, allows sacrificial fowl to peck and then sacrifices the fowl. If the fowl does not peck, they leave that Podu patch, lest diseases befall the family members.

Similarly, before starting Podu clearance, the Porjas in Chuttumitta village of Visakhapatnam district approach 'Muhurthagadu' to decide an auspicious day. On the prescribed auspicious day the head of the family takes 'Pujari' to the field, selects one corner of the field, plasters it with cowdung, draws lines with 'Chodi' powder, decorates it with turmeric powder and vermilion. 'Muhurthagadu' chants 'manthras' (Magical incantations) and sacrifices a chicken. The Podu operations are then initiated by clearing the bush and useless trees on the Podu patch. The felled trees are left to dry and then burnt. Before sowing the seed 'roti' or pan cakes are prepared with 'chodi' flour and taken to the Podu field. Half of the 'roti' will be thrown on the Podu field and the rest is consumed by the family members. The leaf in which the pan cake is eaten will be hung from a wooden pole fixed in the Podu field to drive away the evil spirits according to the local belief.

Kondareddis of East Godavari district feed their co-tribals, who help them in clearing the Podu field. The tribal cooks food either in his house or at the Podu field. He offers 3 handfuls of cooked rice to each tribal who helps him in clearing the bushes or trees. They take the cooked rice to their houses and eat along with the food cooked in their houses. This is called "Vetti" (free service). They also celebrate 'Bhudevi Panduga' after burning the dried bushes. On that day 'Pujari' picks one half burnt stick from the burnt Podu field, erects it before the deity (Bhudevi) and sacrifices a fowl.

Koyas of West Godavari district approach 'Pujari' before cutting trees in the Podu. On the day fixed, the tribal goes to the Podu field with 'Pujari', sacrifices a fowl and spills the blood on the field and prays 'Bhudevi' (earth goddess) for good crops and the sky for good rain. Next day onwards he starts cutting trees and bushes.

Festivals connected with Podu : The tribals celebrate various festivals during their Podu operations. These annual festivals are described in brief hereunder:

Itukula Panduga (Kothamasa) : The tribals follow rituals before broadcasting the seed. Tribals in Visakhapatnam district would not sow the seeds in the Podu fields unless they are charmed through certain rituals. On an auspicious day fixed by 'Disari' all varieties of seeds are collected from the house of 'Nayudu' (Village Headman) 'Pujari'. All the villagers assemble at one place and the 'Pujari' chants 'Manthras' and sacrifices a fowl. The seeds are mixed with its blood. The 'Pujari' keeps some seeds in front of village deity. Afterwards the village head man stands on a platform and throws the charmed seed on the villagers assembled. The villagers catch the seed in a cloth held between their hands. The tribals take these charmed

seed to their houses, mix it with the seed to be broadcast and preserve them until the onset of monsoon.

Next day all the male members go for ceremonial hunting. The colourfully decorated women-folk of the village sing various folk songs. No male member is supposed to stay back in the village. If any male member remains in the village, the women folk throw cow dung on him and chastise him. The hunting party returns only after killing an animal. If the hunting party returns without bagging any animals the woman folk heckle and jeer at them by throwing cowdung water. The killed animal is brought in a procession by beating drums and trumpets and singing songs. The animal is kept in the open ground where the tribals meet quite often. They spend the whole night in singing and dancing around the animal. The animal is shared by all the villagers equally whereas the actual hunter gets the flesh from the thighs. Thus it is believed the seeds are fortified with super-natural power.

Bicca Parbu : Khonds of Visakhapatnam district celebrate this festival before starting sowing operations. The villagers collectively celebrate it during 'Maga Jenju' (February). The 'Havantha' * convenes meeting with the villagers and fixes an auspicious day by consulting the 'Disari'. Some amount is also collected to buy fowl and other items necessary for the festival. On the day fixed by 'Disari' all the villagers assemble at the shrine of 'Jakaripenu'. 'Pejjeni' cleans that place, plasters with cow-dung and decorates it with 'chodi' powder and turmeric. 'Tromba' places a basket of 'chodi' grains and a few grains of redgram, 'Sama' and Paddy on the chodi seed basket. After chanting hymns, a hole is made before the deity and 'sama' seed is dibbled in the hole.

Next morning again all the villagers assemble before the deity, sprinkle some rice on the floor and make the fowl peck the grains. 'Tromba' sacrifices the fowl and spills the blood on the deity first and on the seeds later.

* Khond Village Headman.

A pig is also sacrificed and the blood is spilled on the deity and on the grain. Some water is poured into the hole in which they dropped the seed and it is covered with mud. He distributes the fortified seed among all the villagers and they in turn mix them with the seed preserved in their houses for sowing and broadcast them immediately after the on set of rains. Food is cooked and ceremonial feast arranged to the villagers at the place of the deity.

Hira Parbu : The performance of this festival is restricted to a few Khonds. 'Hira Parbu' is celebrated before sowing seed. During this festival they propitiate 'illu penu' (House hold deity). The 'Pejjeni buddi' performs this ritual first in the house of 'Havantha' (Head man of the village) next in her own house and then in other houses. On an auspicious day fixed by 'Disari', 'Pejjeni buddi' comes to the house of 'Havantha'. The wife of 'Havantha' brings water mixed with turmeric powder and sprinkles on the feet of 'Pejjeni buddi' who plasters a corner of the house with cowdung and decorates with 'chodi' powder and turmeric. She puts one basket of rice and another basket of 'chodi', a 25 paise coin, a few grains on this spot and lits a lamp and keeps it on the rice basket. 'Pejjenibuddi' chants 'Manthras' and prays "Oh God! we are celebrating 'Hira Parbu' bless us with good crops and sound health". The 'Pejjeni buddi' sprinkles rice on the floor and allows a fowl to peck the grain and sacrifices it. The blood is spilled on the ground. The seeds offered to the God are kept separately in the house and are mixed with other seeds and sown immediately after the monsoon starts.

In Srikakulam and Vizianagaram districts 'Savaras' approach 'Disari' to fix an auspicious day for broadcasting the seed in the Podu fields. On the fixed day, the headman goes to the field with the seed to be broadcast and one fowl. He sprinkles some seed in one corner and prays "O Baru-sum jun-jumnai baggigen amam bagsigon amam aganai jommolan appudsir thanyen

amam bangsiegem jumjumnai atellende jommolan appusirren adinai attleng gamdomi" meaning "O Hill deity don't say that we did not give you anything at the start of broadcasting. See this, eat this. Now we are broadcasting". The fowl is allowed to peck the grain and sacrificed. The seed is then broadcast.

Arvu Parbu : Khonds of Visakhapatnam district celebrate this festival before starting weeding operations. Only interested families celebrate this festival. On the day fixed, they take 'Pejjeni buddi' to the field. A spot is selected and cleaned. It is plastered with cowdung and lines are drawn with 'chodi' powder where turmeric powder and vermilion are also applied. After chanting hymns 'Pejjenibuddi' breaks a coconut and sacrifices a fowl. Later feast will be arranged to the members present for conducting weeding operations.

Junanga Parbu : Khonds of Visakhapatnam celebrate this festival in the month of 'Ratta Lenju' (July) and offer prayers to 'Jakari Penu'. Disari fixes an auspicious day and on that day 'Pejjeni' plasters the floor in front of the Jakaripenu and draws lines with chodi powder and decorates with turmeric powder and vermilion. She offers roasted maize heads to the deity. She sprinkles rice before the deity and makes the fowl peck the grain and sacrifices it. A feast is arranged to the villagers with the money and grain collected for the purpose.

Kumda Parbu : This festival is celebrated by most of the tribal communities in Visakhapatnam district. Khonds call it 'Kumda Parbu' (Kumda means pumpkin). This is performed in the month of Dandapanna-Lenju (August).

Every household celebrates this festival. On the day fixed by 'Disari', 'Pejjenibuddi' performs it in the house of 'Havantha', followed by her own house and other houses in the village. The festival is celebrated to offer pumpkin leaves to 'Illupenu' before the tribals start consuming the new leaves. The leaves are placed by the side of rice basket. They pour some rice before the diety and make a fowl to peck the rice after which it is sacrificed. The blood of the sacrificed animal is spilled on the leaves. After celebrating this festival only they start eating pumpkin leaves. Mali tribe also celebrates 'Gummadikotha' festival. A week earlier 'Nayudu' (Headman) assembles all the villagers and after consultation fixes auspicious day to celebrate the festival. Individual families celebrate this festival. On the day fixed their houses are plastered with cowdung. All the family members take oil bath. 'Bonam' (offering to the deity) is cooked with rice. Pumpkin curry is also prepared. The cooked 'Bonam' and pumpkin curry are placed on pumpkin leaf and offered to their ancestral spirits. A part of 'Bonam' and pumpkin curry is carried to the fields. In the field a stick tied with a piece of cloth is erected and a fowl sacrificed. From then onwards they can eat pumpkin and its products.

Korra-Sama-Kotha : The tribals of Visakhapatnam, Vizianagaram and Srikakulam districts celebrate this festival. 'Korra' and 'Sama' crops will be ready for harvesting in the months of July and August. 'Nayudu' (Headman) assembles all the villagers and decides the day for celebrating the festival at the suggestion of 'Disari' and collects some amount in order to meet the cost of the sacrificial animal. On that day 'Pujari' cooks food with Korra and Sama grains and take the food to the field of either Naidu or any field which is ready for harvesting along with goat, fowl, chodi powder, turmeric, vermilion and agarbathi. Pujari cleans one corner of the field plasters with cowdung, decorates with 'chodi' powder, turmeric

and vermilion. He keeps the cooked food on the leaf plates and after chanting manthras he sacrifices the fowl and goat in the name of ancestral spirits for protecting the fields, people and animals from all diseases. Then the flesh of the animal is distributed among all the villagers.

The savaras of Srikakulam and Vizianagaram propitiate 'Hill diety' (Baru sonum) before harvesting 'Korralu'. It is the first crop that is ready for harvesting in the Podu fields. Individual families celebrate this festival. 'Disari' fixes an auspicious day for celebrating this festival. On the request of the head of the family 'Disari' and 'Kudan' cook 'Bonam' (ceremonial offering) with Korra grain and recite 'Manthras'. They sprinkle rice and allow the fowl to peck the rice. If it pecks, it is believed that the Baru-Sonum is pleased. The fowl is sacrificed and offerings served to the members of the family.

Jakari and Durga worship : Savaras and Jatapus of Sri kakulam and Vizianagaram districts propitiate Jakari and Durga deities to protect their standing crops from wild animals and to safeguard themselves. It is celebrated in the month of October.

The village head collects some money or grain from the villagers to purchase sacrificial animals and other offerings. The 'Disari' and 'Buyya' go to the out-skirts of the village with two knives representing the two dieties, Jakari and Durga, and plaster that place with cowdung and decorate that place with 'chodi' powder and turmeric powder. The two knives are placed before the diety and after chanting the manthras, they break coconut first and later sacrifice a buffalo and pig to Durga and Jakari respectively by Savaras and goat by Jatapus. The blood of the sacrificial animals is spilled on the knives as the deities are supposed to kill the wild animals which spoil

the standing crops with the knives. The 'Disari' and 'Buyya' share the heart of the animals sacrificed and the rest is distributed among all the families of the village.

Kandi Kotha: Before starting harvesting operations of red gram, most of the tribals of Visakhapatnam District celebrate this festival. 'Nayudu', the village Headman, assembles all the villagers and fixes the day by consulting 'Disari'. Donations to purchase goat and fowl are also collected. Mukma Devi, wife of Ganga Devudu is propitiated. On the day fixed for 'Puja', 'Pujari', goes to the deity, gives bath to the idol, plasters the floor with cow-dung and draws lines with 'chodi' powder. He offers jaggery plantains, and cooked food to the deity and decorates the idol with turmeric paste and vermillion. He burns agarbathi. Pujari chants 'manthras' and sacrifices the fowl and goat to the deity. The flesh of the fowl and goat is shared by all the villagers. It is a taboo to the villagers to eat red gram without celebrating this festival.

Savaras and Jatapus also celebrate 'Kandi Kotha' festival. It is the most important festival to these two communities. The festival is celebrated for two days. 'Disari' fixes an auspicious day to celebrate this festival. On the day the villagers collect some amount for the purchase of fowl, pig or goat and rice for feast. First day they assemble at the shrine of the 'Jakari' deity. 'Janni' gives bath to the deity, plasters the place with cowdung, draws lines with 'chodi' powder and decorates the deity with turmeric paste and vermillion. 'Bonam' is cooked and placed in adda plates along with sugar, 'Atukulu' (pressed rice) and 'Guggilam' (incense) before the deity. Rice is sprinkled on the floor. 'Disari' recites some hymns and allows the fowl to peck the rice. If the fowl pecks the rice, it is believed that 'Jakari Devatha' is pleased with their offerings. Savaras first sacrifice the fowl and follow it up with pig or

buffalo sacrifice whereas Jatapus offer goat sacrifice in place of pig or buffalo. They cook food and arrange feast to all the villagers at the shrine. The following day 'Kangalapanduga' is celebrated. On this day also all the ritual practices of previous day are followed. A goat is offered as sacrifice to the deity. Next day onwards they start harvesting red gram crop. It is believed 'Jakaridevatha' will come in the form of tiger and eat cattle belonging to the villagers, if they do not celebrate this festival.

Beliefs: Sometimes the fowl offered for sacrifice before starting Podu operations does not peck the grain. The tribals of Visakhapatnam believe that they may be afflicted with disease if they cultivate that Podu land. Before sowing seed they are purified with the blood of fowl sacrificed to 'Nishan' deity. The soaking of seed with sacrificial blood is expected to fortify the seed with supernatural powers which help healthy germination. The tribals celebrate Kandi Kotha before harvesting of red gram. It is a taboo to eat red gram without first offering the newly harvested pulse to the deity. Savaras and Jathapus of Srikakulam and Vizianagaram district believe that if they fail to celebrate 'Kandikotha' festival, 'Jakari Devatha' will come in the shape of tiger and kill the cattle belonging to the villagers.

During 'Korra-Sama-Kotha' festival the tribals first offer the newly harvested grain to the ancestor spirits. It is believed that if they eat the Sama or Korra grains without celebrating this festival, they are sure to suffer from stomach-ache and ulcers. Similarly, it is a taboo to the tribals of Visakhapatnam District to eat pumpkin leaves, flowers and fruit without Gummadi Kotha or Kumda Parbu.

The Konds of Visakhapatnam District believe that without the blessing of Jakari Penu they will not get bumper crops. So to please the deity 'Bicca Parbu' is celebrated before starting sowing operations in the Podu fields. During this festival, they dibble a few seeds in the ground before 'Jakari Penu'. At the time of dibbling the seed, they take care not to touch the earth with their nails as they believe that if the nails touch the earth, the crops will be stunted in growth. Further, Savaras and Jatapus propitiate both Jakari and Durga deities in the month of October to get protection for their standing crops from wild animals.

SOCIO-ECONOMIC CONDITIONS

A study was conducted by selecting a few villages in each I.T.D.A. with specific reference to podu cultivation. While selecting the villages care was taken to cover various tribal groups and examine their customs and practices in undertaking podu cultivation. The villages were selected taking into consideration, factors like accessibility and extent of dependance on Podu cultivation. The villages selected in each district and tribal groups studied are shown below:

Sl. No.	District/ I.T.D.A.	Mandal	Village	Tribal groups
1.	Srikakulam/ Seethampeta	Seethampeta Kothuru	Seedhi Althi	Jatapu Savara
2.	Vizianagaram/ Parvathipuram	Gummalakshmipuram Pachipenta Kurupam	Gopalapuram Kondamusuru Thompalapadu	Savara Konda Dora Jatapu
3.	Visakhapatnam/ Paderu	Dumbriguda G.Madugula Chinthapalli Muchingputtu	Ballyaguda Chuttumitta Kommaronchula Gudamaliputtu	Khond Porja Gouda, Khond Malis Konda- Kammara Valmikis
4.	East Godavari/ Rampachoda- varam	Y.Ramavaram Y.Ramavaram Maredumilli	Boddagandi Kanivada Chekkavada	Konda Reddy Konda Reddy Konda Reddy

Out of the 12 villages selected, 9 are located far away from the road point and 3 are relatively nearer. All tribal groups practising shifting cultivation were covered by the study.

Population:

Altogether 479 families with 2125 members of which the number of males is 1089 while that of females 1036 were studied. The average size of the family worked out to 4.4. The village-wise number of families studied and population is given hereunder:

S.No.	District/ I.T.D.A	Village	No. of families	Population		
				Male	Female	Total
1.	Srikakulam/ Seethampeta	Seedhi	71	196	135	331
		Althi	23	35	36	71
2.	Vizianagaram/ Parvathipuram	Gopalapuram	15	43	29	72
		Kondamusuru	24	56	52	108
		Thompalapadu	27	59	63	122
3.	Visakhapatnam/ Paderu	Ballyaguda	21	49	43	92
		Chuttumitta	21	48	42	90
		Kommarronchula	26	66	53	119
		Gudamaliputtu	43	96	95	191
4.	East Godavari/ Rampachodavaram	Boddagandi	31	74	73	147
		Kanivada	104	208	236	444
		Chakkavada	73	159	179	338
			479	1089	1036	2125

Literacy:

The tribals who can read and write have been considered as literate persons. Out of the total population of 2125, the number of literates is 131, constituting 6.16% to the total population. The details of literates in the selected villages are presented below:-

Sl. No.	District/ I.T.D.A.	Village	Total population	No. of literates	% of literates
1.	Srikakulam/ Seethampeta	Seedhi	331	16	4.8
		Althi	71	6	8.4
2.	Vizianagaram/ Parvathipuram	Gopalapuram	72	6	8.3
		Kondamusuru	108	Nil	Nil
		Thompalapadu	122	16	13.1
3.	Visakhapatnam/ Paderu	Ballyaguda	92	4	4.3
		Chuttumitta	90	11	12.2
		Kommaronchula	119	7	5.8
		Gudamaliputtu	191	3	1.5
4.	East Godavari/ Rampachodavaram	Boddagandi	147	18	12.2
		Kanivada	444	16	3.6
		Chakkavada	338	28	8.28
			2125	131	6.16

The basic facilities available to these villages like housing, drinking water, irrigation, communication, education, medical and health, banking, marketing, electricity etc., are given in the Annexure - VII.

Assessment of the economic situation with statistical tools in a primitive society is apriori a difficult task. The 12 villages selected for study with differing ethnic composition lying in varying agro-climatic zones presents a variegated picture but have one feature in common and that is the practice of 'Podu' cultivation. The position is briefly summarised as follows:-

Economic Status & Occupational Pattern:

The economic status of tribals in the surveyed families in sample village is presented in Annexure- VIII. The total population

of the 12 villages studied is 2125, of which 1260 members are earners who constitute 59.29%. Non-earners are 865 constituting 40.71% to total population. Children and aged persons are categorised as dependents (non-earners). In tribal areas, woman does as much work as man if not more, she participates in agricultural operations, collection of Minor Forest Produce and also takes part in the non-agricultural labour activity besides attending household chores, child rearing etc., therefore, the female population excluding the aged and children is included in the category of earners.

Agriculture either shifting or settled, especially the former and Agricultural labour constitute the main occupation of tribals. Collection of Minor forest Produce, forest labour etc., are subsidiary occupations. The analysis of occupational pattern shows that 95.7% of the tribals are engaged in Agriculture and the remaining 4.3% are depending on non-agricultural activity. 142 families (29.7%) are solely dependent on Podu cultivation, 24 families (5.1%) depend solely on settled cultivation while the rest of 292 families (60.9%) are practising both Podu and settled cultivation. With regard to 21 landless families, it is found that they are depending on either Agriculture labour, construction labour or other-wise employed Annexure - IX.

Land Holdings:

In the 12 villages studied the total extent of land in possession of tribals is 990.77 hect., which includes dry, wet and Podu lands. Out of 479 surveyed families, 458 families are having land holdings (95.60%) and 21 families are landless which constitutes 4.40%. Out of 990.777 hect., 386.972 hect. is dry land (39.05%). 62.305 hect., is wet land (6.29%) and 541.50 hect. is Podu land (54.65%). Out of 990.777 hect. of total land, 440.295 hect. is 'patta' land and 550.482 hect. of land is in possession of tribals without 'patta' and percentage of

patta and non-patta lands comes to 44.43 and 55.57 respectively. The average size of settled cultivation land holding per family works out to 2.16 hect. whereas the Podu land is 1.25 hect. both under cultivation (0.951 hect.) and abandoned (0.299 hect.).

The average size of land holding per family is large in Gudamaliputtu village of Visakhapatnam district followed by Gopalapuram village of Vizianagaram district. In case of Gudamaliputtu, the average size of land is 4.190 hect. per family and 3.336 hect. in Gopalapuram. The average size of land is very small (1.291 hect.) in Althi village of Srikakulam district followed by Chuttumitta and Ballyaguda villages of Visakhapatnam district. The land holdings and distribution of land among the villages surveyed is presented in Annexure-V. It indicates that large part of the land is under Podu cultivation (541.50 hect. out of total extent of 990.777 hect.) followed by dry cultivation while only a small portion is under wet cultivation. The extent of Podu land without patta is 425.060 hect. far exceeds the Podu land with patta 116.437 hect.

The details presented in Annexure-IV pertain to extent of Podu land available in 12 sample villages. The total Podu land available is 541.50 hect. owned by 434 families, of which 294.65 hect of Podu land is under cultivation, 119.03 hect. of land is under plantations and remaining 127.82 hect. is abandoned (54.42% of Podu is under cultivation, 21.98% is under plantation and 23.60% is abandoned Podu). The average size of Podu land in Gopalapuram is large i.e. 2.43 hect. per family followed by Kondamusuru of Vizianagaram district and Seedhi village of Srikakulam district. The distribution of Podu lands in sample villages of Vizianagaram district is large when compared with

other villages surveyed in the proposed project area. The distribution of tribal families by the size of Podu holding is presented in Annexure X. Out of 434 families having Podu lands, 113 families are possessing podu land below 1 acre (0.405 hect.), 125 families between 1.1 - 2 acres (0.046 - 0.81 hect.), 57 families own Podu land between 2.1 to 3 acres, (0.82 - 1.21 hect.) 46 families own 3.1 to 4 acres (1.22 to 1.619 hect) and an equal number of families are possessing Podu land between 4.1 to 5 acres (1.620 - 2.024 hect) while the remaining 47 families own above 5.0 acres (2.024 hect). The classification of Podu holdings reveal that more than 50% of the families are having podu holdings below two acres.

Podu land holdings can be classified into 6 categories: (1) Those within the reserve forest under cultivation, (2) those within the reserve forest but abandoned, the podu fields lying outside Reserve forest can also be classified as (3) those with patta and under cultivation, (4) those with patta but abandoned (5) those without patta under cultivation and (6) those without patta but abandoned. There is likelihood of overlap between categories (1+2) and (5+6).

Wage rates in the tribal areas are very low in comparison to the plains area. The wages prevailing in selected villages range from Rs.3/- to Rs.10/- depending on demand for agricultural work. Some times, the wages are also paid in kind. Suppose if a person is engaged in harvesting the crops, she/he will be paid 2 to 3 'kuncham' (local measure) of grain for the work attended in a day. However, the pattern of wage rates in Podu cultivation is furnished below:

	<u>Male (Rs. per day)</u>	<u>Female (Rs. per day)</u>
Digging	Rs.3.00 to Rs.10.00	Rs. 2.50 to Rs. 8.00
Weeding	Rs.3.00 to Rs. 5.00	Rs. 2.50 to Rs. 5.00
Harvesting	1 'kuncham' of grain	1 'kuncham' of grain

The value of family labour is only imputed market wage rate. Payments are made either in cash or in kind or both. Sometimes mid-day meal is given. Method of payment varies depending on the type of operation. However, the 'Podu' operations are mostly under taken on mutual help and exchange labour basis, the host invariably giving food and one or two measures of harvested grain.

In the 12 surveyed villages, it is found that in 8 villages of Visakhapatnam, Vizianagaram, Srikakulam and East Godavari districts, wet land is available. The irrigation sources are basically hill streams. The extent of wet land is 62.307 hectares. Actually in some villages, as per revenue records, there is no classified wet land, but during rainy seasons, the tribals divert the stream water by constructing checkdams and cultivate paddy. It is considered as wet land cultivation. The tribals are raising two crops, where irrigation facility is available and in some cases they are raising only one crop. The availability of wet land is very less in tribal villages and the percentage works out to 6.2 to the total land of the villages. There is no wet land in Chuttumitta and Kommeronchula villages of Visakhapatnam district, Boddagandi and Chakkavada villages of East Godavari district. The large portion of wet land i.e., 17.71 hectares is available in Gudamaliputtu of Visakhapatnam district followed by Tampalapadu in Vizianagaram district and Althi of Srikakulam district.

Annual Costs & Returns:

Under wet land cultivation, preparation of land starts with ploughing. It is undertaken twice or thrice in transverse directions and the number of ploughings varies depending upon the nature of soil and the type of crop that is to be grown in the land. In the case of wet land where paddy is grown, ploughing is done 3 to 4 times. After preparation of land, they sow the paddy and apply farmyard manure. In recent times, the tribals are encouraged to use high yielding variety seeds in limited areas of surveyed families. The tribals of this area undertake weeding two to three times in paddy. Since the preparation of land starts from July, by the end of December harvesting of paddy is completed and threshing by the end of January.

The input cost is obviously higher in case of wet farming followed by dry and podu. The cost of wet land cultivation in the surveyed villages ranges from Rs.432 to Rs.864 per hectare depending upon cost of labour. It includes family labour, hired labour, seeds, fertilizers etc. The yield per acre on an average is 10 quintals. In surveyed villages, the total output value from 62.307 hectares comes to Rs.0.1749 Million and output value per hectare works out to Rs.2807.58/-. The gross value of the output is calculated with reference to the sale price prevailing in the market. The value of by product is included in the gross value. The cost of wet cultivation in Ballyagude, of Visakhapatnam district and Seedhi of Srikakulam district is comparatively higher when compared to other villages. This is due to use of chemical fertilizers and high wage rates. The average net output value per hectare works out to Rs.2186.00. The

highest net value derived per hectare is Rs.2593/- in Seedhi village of Srikakulam district and lowest net output value is Rs.1939/ in Kanivada of East Godavari district (Annexure XI).

Sama, Chodi, Jonna, Vooda, Horsegram, Niger, Castor etc., are grown in dry land in the sample villages. (Annexure XII); out of 12 villages surveyed, only in 10 villages, dry land farming is practised. In Ballyaguda village and Chuttumitta village of Visakhapatnam district there is no dry land and total dry land under cultivation in these 10 villages comes to 379.70 hectares. The percentage of dry land with reference to total land comes to 38.32%. Large extent of dry land is available in Gudamaliputtu village (92.21 hectares) of Visakhapatnam district and its percentage is 24.34 followed by Chekkavada of East Godavari district where the dry land cultivation is also proportionately higher. The cost of cultivation per hectare in dry land varies from Rs.296.40 to Rs.679.25 depending on the usage of fertilizers. The total output value of various dry cultivation crops grown on 379.70 hectares comes to Rs.0.7949 Million and output value per hectare works out to ^{Rs.}2093.82. The input value per hectare is Rs.428.30 and net output value per hectare works out to Rs.1665.77 in the surveyed villages.

Large extent of Podu land is under cultivation in Kanivada village of East godavari district followed by Seedhi village and very small extent of Podu land is available in Chuttumitta village of Visakhapatnam district. In podu lands, the tribals raise crops like 'Kandi', Sama, 'Korra', 'Jonna', 'Ganti' etc. In some villages, they are raising Kandi (Redgram) in the 1st year and mixed crops in subsequent years and whereas in some

areas they are raising mixed crops from the first year itself. The cost of cultivation per hectare ranges from Rs.370.50/- to 738.50/- in the surveyed villages. The average cost of cultivation in Podu lands comes to Rs.484.98/- per hectare. The gross output value in 294.652 hectares of Podu lands is Rs.0.4878 millions and the rate of output value per hectare works out to Rs.1655.64 and net output value on Podu lands is Rs.1170.66 per hectare (Annexure-XIII).

A comparative analysis of incomes from the 3 types of farming i.e. wet, dry and podu indicates that there is a significant difference in the levels of net incomes. Wet farming generates more income than dry and podu farming. In the present study, the average net value returns from the three types of cultivations are wet land Rs.2186.00, dry land Rs.1665.77/- and podu land Rs.1170.66.

Income & Expenditure:

The annual incomes derived from different sources are presented in Annexure - XIV. It indicates that major source of income is Agriculture, followed by Agricultural labour. The gross value of the income from land is calculated by adopting the prices prevailing in the local markets. The total income of 479 families is Rs.1.944 Millions of which Rs.1.468 Millions is only from Agriculture (gross value of the Agricultural produce), which constitute 75.48% of the total income. The earnings from agriculture labour is Rs.0.186 millions constituting 9.57% to total income. Income is also derived from the sale of Minor Forest/labour which constitutes 4.95% to the total income. The income derived through Produce collected and forest live stock constitutes 3.28% of the total income. The source-wise average income for a tribal family is presented hereunder:

Sl. No.	Source	Amount Rs.	Percentage
1.	Agriculture	3064.40	75.48
2.	Agriculture labour	388.41	9.57
3.	Non-Agriculture labour	70.58	1.74
4.	Collection of M.F.P	159.07	3.92
5.	Forest labour	41.75	1.03
6.	Live stock	133.00	3.28
7.	Employment (Service)	60.00	1.48
8.	Others	142.17	3.50
	Total :	4059.38	100.00

The average income per family works out to Rs.4059.38. Of all the selected villages, the highest average income (Rs.5,680) is noticed in Gudamaliputtu village of Visakhapatnam district as the holding size is more. The inhabitants (Malis) are good horticulturists and are raising hybrid varieties of vegetable.

The total expenditure of the 479 families is Rs.2.073 Millions (Annexure - XV) which is more than the annual income of the surveyed families. The average expenditure of the family is Rs.4,327. Major amount was incurred for consumption of food. Out of total expenditure of Rs.2.073 Millions, Rs.1.123 Millions was incurred towards food and the percentage works out to 54.22. An amount of Rs.0.148

Millions was incurred towards clothes. Considerable amount was incurred on consumption of liquor. However, the item-wise expenditure per family is presented below:

Sl No.	Item	Expenditure	Percentage
1.	Food	2,346.34	54.22
2.	Clothes	310.00	7.16
3.	Education	3.34	0.08
4.	Festivals and ceremonies	269.44	6.23
5.	Household equipments	144.10	3.33
6.	Fuel and lighting	122.56	2.83
7.	Travelling	28.33	0.65
8.	House repairs	89.86	2.08
9.	Cultivation expenses	481.60	11.12
10.	Liquor	411.61	9.50
11.	Others	121.00	2.80
Total:		4,327.18	100.00

The preceding discussion on the income and expenditure pattern gives an idea of the standard of living of tribals in the surveyed villages.

The average annual income of the surveyed families is Rs.4059 per family and expenditure is Rs.4,327. All the tribal families incur expenditure over and above their income.

Indebtedness:

In the villages selected for survey, the data on indebtedness from different sources is collected by canvassing household schedules and presented in Annexure XVI. It reveals that out of 479 families surveyed in 12 villages, 103 families have obtained loans either from Bank, Corporation or non-tribals or fellow tribals. The percentage of indebted families works out to 21.50. It is observed that some of the tribals are not revealing the debts. 38 tribal families borrowed to an extent of Rs.68,540/- from Banks and repayment was to the tune of Rs.21,300/- and the percentage of repayment to banks comes to 31.07. The share of amount borrowed from non-tribals is Rs.30,670/- (26.91%) and the repayment was Rs.900/- only. The average debt amount per family works out to Rs.1107/-. High rate of indebtedness is prevailing in Gudamaliputtu followed by Ballyaguda village of Visakhapatnam District. In Boddagandi and Chakkavada villages of East Godavari District, the tribal group inhabiting is Konda Reddi. It is revealed that they never go in for huge amount of loans and generally borrow from other tribals and is repaid immediately.

It is informed during the survey that non-tribal traders visit the tribal villages at harvest time and advance loans to the tribals on a condition that the produce should be sold to him at an agreed rate. For example if the prevailing market rate of red gram is Rs.15/ per 'Kuncham' (a unit of 3 Kgs.), the showcar offers Rs.6/- to 7/-. At the time of harvesting, the showcar comes to the village and collects the produce. The Savaras of Gopalapuram informed that they will go to non-tribal showcar of Gummlaxmipuram, a nearby town for this purpose.

The Khonds of Ballyaguda village (Visakhapatnam district) told that the showcars of Dharmavaram (Vizianagaram Dist.) are advancing loans to the tribals while the crop is in progress. Here also the tribal has to sell the produce to the same showcar at an agreed rate.

Assets:

Assets include cultivable land owned by each household, house, cattle sheds, agricultural implements, household furniture, livestock, household utensils and ornaments. (Annexure - XVII). The household equipment of a tribal family include cot, wooden or trunk boxes and cooking vessels. The assessment of the value of the assets particularly the land and household property in the tribal areas is very difficult as in these areas the scope for sale and purchase transactions of immovable properties are rare and infrequent. However, the assessment of assets was made by interviewing the knowledgeable persons. The total value of the assets in 12 sample villages comes to Rs. 9.105 millions of which major value is derived from land only, followed by housing and live stock respectively. The average asset value per family comes to Rs.19,009/-.

PART II

TRIBAL DEVELOPMENT POLICY

During the British era, neither specific measures were adopted for the welfare of the tribals nor sound policy evolved for development. Infact, many struggles were waged by the tribals against the non-tribal exploiters. And in every one of them, the tribals were routed and the exploiters triumphed with the active assistance of the aliens. Describing the impact of British rule on tribes in India, J.H. Hutton* of had rightly pointed out that "Far from being/immediate benefit to the primitive tribes, the establishment of British rule in India did most of them much harm than good." The Census of India 1951 reports that "there is even difference as regards the origin of the degradation and the backwardness of the tribes. But it appears that the initial inroad on the integrity of the tribal life was made by the advent of British rule. The British methods of collection of revenue and the maintenance of law and order directly resulted in the loss of the tribal authority of the tribal elders and the break-up of the tribal solidarity. This automatically brought revolution in the nature of contact between the men of the plains and of the hills. This feature is mere corollary of the breaking of sanctity of the tribal life originating from the British occupation of the land."

The policy of isolation adopted for tribal areas by the British administration resulted in narrowing world view of the tribal

* J.H. Hutton, I.C.S., as quoted in the Report of the Scheduled Areas and Scheduled Tribes Commission, 1960-61

because of the closed situation and on the whole the tribal population remained outside the purview of modern civilization. To mitigate the long lasting deprivation of the tribals and to bring them into the mainstream of national life, planned development has been initiated for the promotion of tribal welfare after independence. The Government policies and programmes for the development of tribals have been revamped from time to time to suit the tribal way of life.

The late Prime Minister Jawaharlal Nehru said that the greatest problem is the development of synthesis, that is, how best to bring the blessings and advantages of modern science and technology without destroying the rare and precious values of Tribal life, not interfering with their ways of life but helping them to live it". Pandit Nehru's views on tribal development were as follows:

- 1) People should develop along lines of their own genius and we should avoid imposing anything on them.
- 2) Tribal right in land and forest should be protected.
- 3) We should try to train and build up a team of their own people to do the work of administration and development.
- 4) We should not over-administer these areas or overwhelm them with a multiplicity of schemes. We should rather work through and not in rivalry to their own social and cultural institutions.
- 5) We should judge the results not by statistics or the amount of money spent, but by the quality of human life that is evolved.

In tune with the spirit of the constitution, varying strategies of development to meet the tribal situation have been evolved and executed from one plan period to another. The development of Scheduled Tribes in the States has been set out to attain economic self sufficiency and removal of poverty.

During the I Five Year Plan, the policy of tribal development has been clearly enunciated. During II Five Year Plan, "project approach" was first initiated by establishing four multipurpose projects in areas of Tribal concentration in Andhra Pradesh. Based on the successful experiences of the II Plan more tribal areas and larger tribal population were brought under intensive development by opening 20 Tribal Development Blocks besides converting the existing 4 Multipurpose Projects into Tribal Development Blocks during III Plan. The programme implementation in these 20 Tribal Development Blocks was intensified during IV Five Year Plan. The Naxalite movement in tribal areas had an impact on the policy making for Tribal development during the IV Plan period. Consequently, conspicuous emphasis was laid on "the common man, the weaker section and unprivileged" so that "the planning should result in greater equality in income and wealth and that the benefits of development should accrue more and more to the relatively less privileged classes of society". Hence, the plan has initiated special programmes like S.F.D.A., Tribal development projects, forestry schemes, crash schemes for rural development.

A broad strategy for tribal development was evolved during V Five Year Plan. The Planning Commission decided that a Sub-Plan should be drawn up for areas of tribal concentration in order that "all activities of Government and Semi-Government Organisations, financing and Credit Institutions and special sectoral programmes may be fully integrated". Accordingly, a total picture of the development of the region is presented.

In Andhra Pradesh, areas of tribal concentration were identified by including all Scheduled villages, all Tribal Development Block villages and all villages with tribal concentration lying in contiguity with Scheduled and Tribal Development Block areas. These tribal concentrated areas are now known as "Sub-Plan areas", which are distributed in Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Khammam Warangal and Adilabad districts covering 7,078 villages.

The concept of Sub-Plan was introduced in V Plan, wherein the emphasis was laid not only on developmental activities but also on protection. The approach adopted was area based along with the focus on the Scheduled Tribe population. This concept was evolved after a thorough review both at national and State levels of the tribal development situation as it prevailed at the end of IV Plan, which showed that the tribals lagged behind in their level of development compared to the general population in plains areas. Inadequacy of investment on development of these areas and people was identified as the main reason. Upto the end of the IV Plan, the burden of tribal development was placed on Tribal welfare sector alone for which the allocations made were too low to have impact of any kind.

An "Integrated Development Approach" was followed during V Five Year Plan with two broad objectives viz., (i) bridging the gaps in levels of development and (ii) ensuring quality of life. To achieve these twin goals, it was considered necessary to provide the main thrust of finances from the funds of general sector departments. Backwardness or as measured in terms of the gaps in development between tribal areas and plains areas

should be quantified sector-wise and the quantum of levels of investment be determined with reference to the gap to be filled in each of the development activities.

For the first time, the role of general sector departments in tribal development was thus defined and their outlays for sub-plan have been quantified. The special central assistance was given to the state to supplement the State Plan programmes. The role of institutional finance was also defined and certain centrally sponsored programmes were also initiated. The sources of finance for Sub-Plan are as given below:-

- 1) State Plan - Tribal Welfare.
- 2) General Sector.
- 3) Special Central Assistance.
- 4) Central and Centrally Sponsored Schemes.
- 5) Institutional Finance.

During the VI Five Year Plan, while continuing the Integrated Tribal Development Agencies (I.T.D.As.), special programme benefits were extended to 5 more Primitive Tribal Groups making a total of 8 such groups. A new strategy has been introduced for the benefit of tribals living outside the Sub-Plan area in pockets of concentration in plain areas. This is called Modified Area Development Approach (M.A.D.A.). The objectives during VI Plan period as set out in the report of the Working Group on

Tribal Development are as follows:

A. Raising the productivity levels in the fields of Agriculture Horticulture, Animal Husbandry, Forestry etc. to create adequate impact to enable 50% of tribal families to cross the poverty line.

B. Emphasis on education..

C. Creation of adequate infrastructure.

D. Elimination of Exploitation.

During VI Plan tribal populations are categorized for affording programmes of development suited to the geo-ethnic situation of each category as follows:

- (i) Those living in areas of tribal concentration, both in the scheduled and contiguous non-scheduled areas identified as Sub-Plan area covered by 8 I.T.D.As. with a population of 1.357 millions.
- (ii) Those living in small pockets of tribal concentration (outside the Sub-Plan area) identified for implementation of 38 M.A.D.A. Pockets with the population of 0.332 millions.
- (iii) The 8 Tribes that have been identified as Primitive Tribal Groups because they are at pre-agricultural level of technology with a very low level of literacy etc. and found living in the Sub-Plan area and outside with a population of 0.246 millions.
- (iv) Dispersed tribal population of 1.271 million living in symbiosis with the rural population.



In this connection, it may be pointed out that in the case of last category of tribal population mentioned above, no particular scheme of infrastructural development for aiding tribal development is feasible. In this situation, tribal development has to be restricted to mostly family based schemes sustained in the matrix of general infrastructure.

Plan outlays over the plan periods are given in the following

table:

(Rupees in millions)

Plan period	State as a whole	Tribal Welfare/ Sub-Plan	Percentage to State Plan
I Five Year Plan	967.8	11.4	1.17
II Five Year Plan	1886.0	25.0	1.33
III Five Year Plan	3524.2	17.9	0.50
IV Five Year Plan	4488.7	97.8	2.18
V Five Year Plan	14411.2	455.0	3.16
VI Five Year Plan	38628.9	1402.7	3.63

With the introduction of Sub-Plan since V Five Year Plan, large allocations have been made for Tribal development. An amount of Rs.455.0 millions and 1402.7 millions was spent in V and VI Five Year Plans.

Level of Development:

Tribal development has received considerable attention and there has been a substantial increase in investment with succeeding Plan formulation.

The per capita investmens in different plan periods is as follows:

Plan periods	Per capita investment
	Rs.
I Five Year Plan	15.05
II Five Year Plan	18.89
III Five Year Plan	13.56
IV Five Year Plan	45.60
V Five Year Plan	386.89
VI Five Year Plan	560.45
VII Five Year Plan (Proposed Allocation)	1,743.00

The per capita investment since I Plan rose from a meagre Rs.15.05 to 560.45 in the VI Five Year Plan which is proposed to be raised to Rs. 1,743.00 during VII Five Year Plan. Inspite of the policies and programmes so far adopted and implemented, the task of economic development of Scheduled Tribes is yet to be tackled effectively.

Though there is an apparent change in the life style of the tribals, yet the quality of life has not improved perceptibly. Despite infrastructural development in economic and social service sectors, the physical and human resources development remained untapped. The factors leading to such a situation vary.

The approaches and strategies did not bring about the desired results to bridge the gulf between the development of tribal

and non-tribal areas and the quality of life of tribals is not improved as evident from the following table:

S.No.	I t e m	Levels of Development at the end of the VI Plan	
		Tribal area	State as a whole
1.	Literacy(%)	7.83	29.94
2.	Length of roads (per 1000 Sq.Kms. area)	75.79 Kms.	120.76 Kms.
3.	Villages electrified (%)	23.00	90.00
4.	Hospitals - bed strength (per 1,00,000 population) (Nos.)	32.00	55.00
5.	Irrigated area to net area sown (%)	25.29	41.29
6.	Rural Water Supply (% of population covered)	30.00	75.00
7.	Gross value of output of food grains per head of rural population (Rs.)	139.70	600.00
8.	Gross value of output of non-food grains per head of rural population (Rs.)	71.24	564.00
9.	Average milk yield per milch animal	0.5 Ltrs.	2.5 Ltrs.

VII FIVE YEAR PLAN:

The strategy of development during VII Five Year Plan is to create durable assets to Scheduled Tribes which can generate continued income to live above poverty line. We have, therefore, proposed a two pronged programme of creating durable assets and protecting them from

exploitation, the details of which are as follows:

- (i) Under poverty line programme, assistance upto Rs. 10,000/- per family is provided as the earlier average assistance of Rs. 1600/- per family did not yield satisfactory results.
- (ii) Horticulture, Coffee plantation, Sericulture and Social forestry are taken up in an integrated manner and each family is provided with one hectare of land as owner participant besides subsistence allowance during the lean months.
- (iii) Special Programmes are initiated to rehabilitate 'PODU' cultivators.
- (iv) To wean the tribals from extremists, a "Compact Area Programme" for Khammam district tribal areas is sanctioned. Special Programmes to help tribals displaced by irrigation projects, wild life sanctuaries and mining projects are under formulation. Special schemes to help tribal women besides improving tribal crafts are also being prepared.
- (v) Buildings for educational institutions and residential accommodation for staff are being provided.
- (vi) 100% enrolment of Scheduled Tribe children in schools and priority for adult education programmes in tribal areas is to be ensured.
- (vii) Provision of required economic and social infrastructure is envisaged.
- (viii) Effective implementation of protective regulations to eliminate the forces of exploitation is being ensured.

During VII Five Year Plan as against the tribal sub-plan outlay of Rs. 5584.0 millions an amount of Rs. 1810.4 millions was spent till the end of 1987-88. The source wise allocation for the VII plan period and expenditure details for 1985-86 to 1987-88 are as follows :

(Rupees in Millions)

Source	VII PLAN ALLOCATION	Expenditure			
		1985-86	1986-87	1987-88	Total
State Plan	2506.00	274.1	375.7	555.4	1205.2
Special Central Assistance	1350.00	77.3	97.3	119.0	293.6
Central Sponsored Schemes	378.00	68.3	93.6	81.1	243.0
Institutional Finance	1350.00	20.9	23.4	24.3	68.6
Total	5584.00	440.6	590.0	779.8	1810.4

The important achievements under various sectors so far as general sector is concerned are as follows:-

I. Agriculture and allied Sectors.

- a) Strengthening of Agricultural Research Station at Chintapally, I.T.D.A., Paderu, Visakhapatnam.
- b) Starting of new fruit Research Station at Maredumilli, I.T.D.A., Rampachodavaram, East Godavari.
- c) Sub centres for Horticulture development at I.T.D.A., Seethampeta, Srikakulam.
- d) Research Station for Horticulture in I.T.D.A., Paloncha, Khammam.
- e) No. of Minor Irrigation Sources constructed is 48.
- f) Extent of area brought under Horticulture is 10,059 Hectares.
- g) No. of Oil engines and electric motors supplied is 4147.
- h) No. of Lift Irrigation Sources developed is 38.
- i) Development of Rural Livestock units at Mandal Headquarters.
- j) Development of Market Yards at Indervally, Utnoor, I.T.D.A. Adilabad and Paderu, Visakhapatnam.

II. Electrification :

- a) Electrification of 1342 Nos. of tribal villages.
- b) Release of Agricultural and other services to 13,020 Nos.

III. Roads :

- a) Length of Roads constructed is 52-60 Kms. with an expenditure of Rs. 3.623 Millions of Special Central Assistance.

IV. Education :

- a) Opening of 2090 single teacher schools to cover all the school-less habitations.
- b) Upgradation of 90 Primary Schools.
- c) Upgradation of 30 Upper Primary Schools into High Schools
- d) Establishment of 2 Teacher Training Centres at Marlavai and Araku.
- e) Opening of 10 Residential Schools.
- f) Opening of 3 Residential Junior Colleges at Utnoor, Bhadrachalam and Chintapalli.
- g) Sanction of staff for supervising the schools.
- h) Opening of 2 Polytechnics at Bhadrachalam and Srisailam and 6 ITIs.

V. Medical and Health :

- a) Opening of 43 Homoeopathy and Ayurvedic dispensaries.
- b) Commissioning of 10 New Mobile Medical Units and strengthening of the existing 24 units.

VI. Housing :

- a) 77,000 houses constructed for Scheduled Tribes under the Weaker Sections Housing Programme.

VII. Infrastructure :

a) Construction of 30 Type-I Quarters, 62 Type-II Quarters and 130 Type-III Quarters and 17 Link Roads.

In Sub-Plan area, wide range of programmes both land based and others like industries, services and business ventures are under implementation. By and large the programmes are beneficial, but the investment is far below the desired level. Besides the provision of huge investment, people participation has to be ensured right from the Plan formulation stage to the grounding of the schemes. At the Plan formulation stage, there is no formal arrangement to associate representatives of the beneficiary group. However, tribal M.L.As and Members of Parliament and Mandal Praja Parishad Presidents as members of Governing Bodies of I.T.D.As are associated in Plan proposals. AT the level of execution, however, the beneficiary participation is fully ensured both by way of cash contribution and contribution in kind of labour and supervision wherever it is possible.

...

VII. Infrastructure :

a) Construction of 30 Type-I Quarters, 62 Type-II Quarters and 130 Type-III Quarters and 17 Link Roads.

In Sub-Plan area, wide range of programmes both land based and others like industries, services and business ventures are under implementation. By and large the programmes are beneficial, but the investment is far below the desired level. Besides the provision of huge investment, people participation has to be ensured right from the Plan formulation stage to the grounding of the schemes. At the Plan formulation stage, there is no formal arrangement to associate representatives of the beneficiary group. However, tribal M.L.As and Members of Parliament and Mandal Praja Parishad Presidents as members of Governing Bodies of I.T.D.As are associated in Plan proposals. AT the level of execution, however, the beneficiary participation is fully ensured both by way of cash contribution and contribution in kind of labour and supervision wherever it is possible.

...

OBJECTIVES AND STRATEGY

It has been recognised that group specific and region specific development has to be given due place in planning for the development of tribals. Appropriate priority was not accorded in the planning strategies to the task of mitigating the adverse impact of certain specific geo-ethnic factors which have stifled growth. Such an approach would have paved the way for optimal tapping of the potential. The major challenge on hand today is to devise solution to problems arising out of such specific situations so as to prevent destruction of nature and maintain ecological equilibrium.

It is time now to adopt group and problem specific approach to prevent deforestation and shifting cultivation while encouraging afforestation, horticulture and other plantations besides undertaking soil conservation measures and develop infrastructure facilities like Communication and make social services like education, health, etc. reach the farthest corners and neglected groups. More than 80% of the tribal cultivators are marginal and small farmers and they operate small holdings and are placed at the lower rungs of the economic order. The economic level of the tribal cultivators who practise Podu cultivation is still lower than that of the marginal and small farmers. Consequently, it calls for a comprehensive development approach.

In the existing socio-economic conditions of the shifting cultivator, the project is to help develop the entire tribal family not only by assisting it in alternate land use to improve economic and ecological conditions but also to reduce illiteracy, malnutrition and disease

in the family as a whole with special focus on women and children. The endeavour would be to improve the quality of life, provide clean drinking water within reasonable reach, adequate housing with house type design of his choice with local material and activate the existing net-work of educational and health institutions not only to improve the coverage of the project area but also to re-orient these institutions to the felt needs of the tribals. The single teacher schools, apart from ensuring 100% enrolment in the age group 5-9, shall also take up adult literacy and non-formal education programmes. Anganwadi workers besides their daily chores of nutrition programme, pre-school training and health education would also help improve the literacy of tribal women. The use and propagation of scientifically established medicinal herbs will be encouraged and expanded.

Before dealing with the problem, it will be useful to assess the 'Podu' cultivation from the expert point of view. The former Inspector General of Forests, Government of India, Sri. M.D. Chaturvedi* made an investigation into the forestry problems in Assam and concluded that "the notion widely held that shifting cultivation is responsible for large scale soil erosion needs to be effectively dispelled. The correct approach to the problem of shifting cultivation lies in accepting it ^{not} as a necessary evil, but recognising it as a way of life not condemning it as an evil practice, but regarding it as an agricultural practice, evolved as a reflex to the physiographical character of the land".

Another expert of Planning Commission Sri. M.S. Sivaraman,

the then advisor of the Planning Commission, opined that it is a mistake to assume that 'Jhuming' (the word used in Assam for shifting cultivation) in itself is unscientific land use. Actually it is a practical approach to certain inherent difficulties in preparing a proper seedbed on steep slopes where any disturbance of surface by hoeing or ploughing will result

*Elwin Verrier, Report of the Committee on Special Multipurpose Blocks, 1960 page 48 & 49.

in washing away of the fertile top soil. Seeds are dibbled ahead of the onset of monsoon so that these may not be washed away and this produces a light cover of protective vegetation which reduces the erosion of the soil when the heavy rains begin. Another authority, the Director of Soil Conservation in the Belgian Congo for the F.A.O. concludes after a thorough study that "shifting cultivation in the Belgian Congo is not today regarded as necessarily unsuitable type of agriculture but rather as the inevitable out growth of various particular local factors". Verrier Elwin, while discussing the problem of shifting cultivation emphasizes that the important thing is to develop shifting cultivation on a scientific basis which will limit its disadvantages and promote the fertility of the soil. At different times, different suggestions have been made for solving the problem of shifting cultivation. In Andhra Pradesh also a programme of action has been drawn up for rehabilitation of Podu cultivators and it is being implemented. The approach broadly is to wean away the tribal from undesirable practices associated with 'Podu' through encouraging adoption of a package of selected agricultural practices to improve productivity.

The Planning Commission has emphasised the need for integrated development on a watershed basis which can be adopted with advantage especially for Podu cultivators.

The following specific objectives are set out for this project:

1. To wean away the tribal from the wasteful practice of shifting cultivation and to make him a self supporting sedantary cultivator.
2. To improve the productivity of the settled agricultural land held by shifting cultivators in the valleys so as to reduce their dependance

on shifting cultivation for livelihood by providing irrigation facility and a package of selected agricultural practices.

3. To take up a scientific and massive programme of afforestation on hill slopes, etc., outside reserve forest in order to achieve the twin objectives of improving the economic conditions of the tribals and restoration of ecological equilibrium. The species mix will be pragmatic and such that it would provide cash incomes to tribals, meet their domestic requirements and provide minor forest produce species and reduce monoculture.

4. To evolve an effective marketing programme with total involvement of the tribals to prevent exploitation, help in primary processing and value addition by providing an assured institutional support price arrangement. Primary processing would be achieved by adoption of appropriate technology - a technology that would not militate against tribal ethos and stage of development that may not reduce the tribal to the state of a wage-earner.

In the light of the objectives envisaged above the following programmes are proposed with a ten year perspective for the rehabilitation of Podu cultivators.

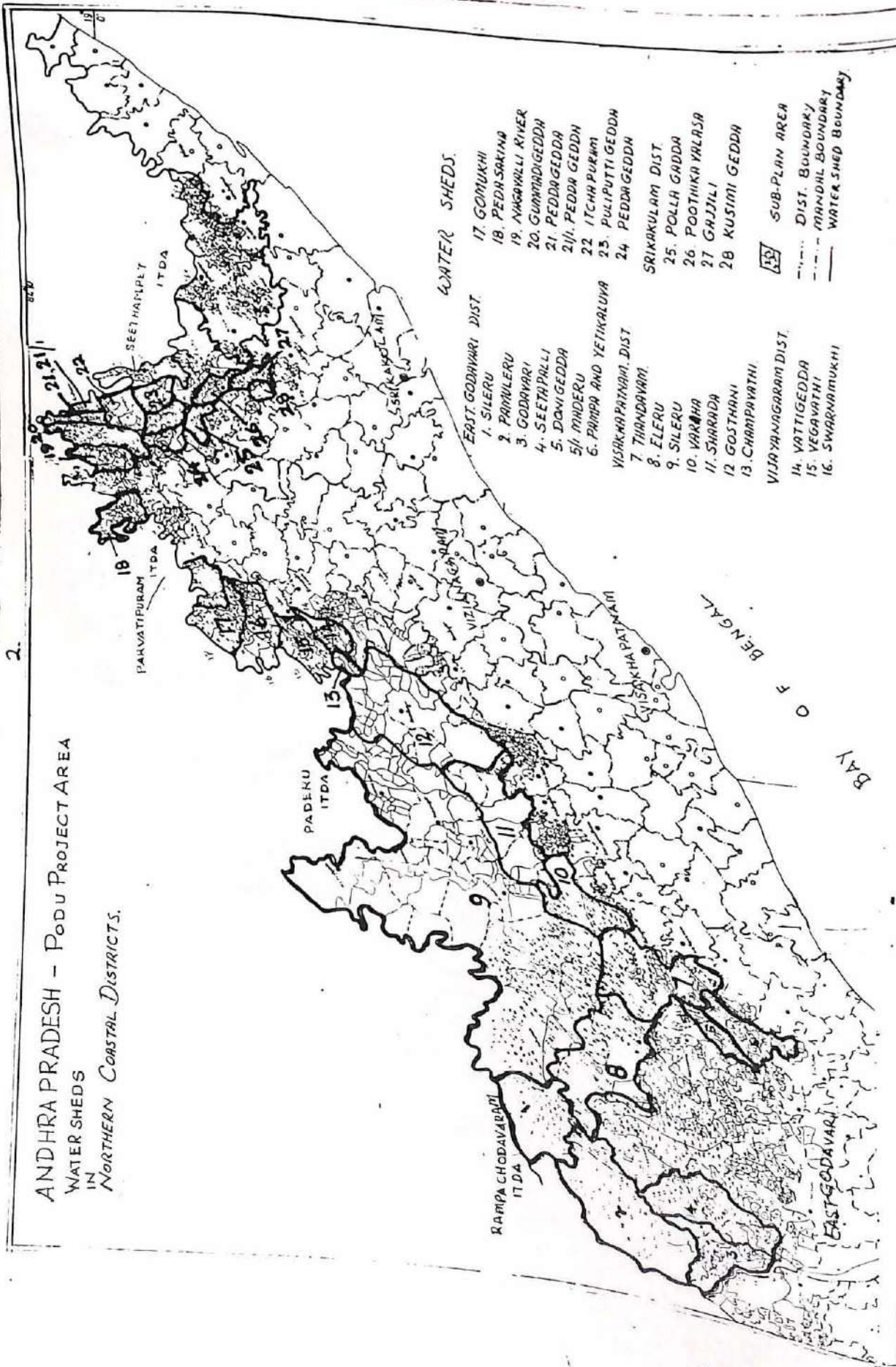
1. Optimal Land and water resource utilisation and soil conservation programme to safeguard soil fertility and to improve the productivity of land.
2. Propagation of appropriate food and commercial crops mix.
3. Social Forestry programme with emphasis on Minor Forest Produce plantations in order to provide sustained income to tribal while restoring green cover.
4. Promotion of Horticulture and fuel wood plantation so as to ensure economic returns.

5. H.R.D. Programme with specific reference to development of the skills of tribal men and women.
6. Improvement of supporting infrastructural services and facilities for the healthy growth of economic activity.
7. Evolving a suitable marketing mechanism to reduce exploitation and ensure fair price.
8. Building up effective delivery system upto village level for the smooth flow of development benefits.
9. Ensuring tribal participation in management of development programmes.

In order to achieve the objectives of the project, a comprehensive strategy is evolved and adopted. Initially identification of Podu areas and families on water shed basis was undertaken to assess the extent of Podu in unreserves. After assessment of Podu area, the magnitude of the problem of Podu cultivation was depicted in each water shed zone. Detailed study of certain Podu villages in each ITDA was conducted to assess the socio-economic situation of the Podu cultivators.

Keeping in view the above objectives and strategies, the Project Report is prepared in order to wean away the tribals from shifting cultivation and assist them in improving their socio-economic conditions and thereby the quality of life.

ANDHRA PRADESH - Podu Project Area
 WATER SHEDS
 IN
 NORTHERN COASTAL DISTRICTS.



WATER SHEDS.

- | | |
|----------------------------|-------------------------|
| EAST GODAVARI DIST. | 17. GOMUKHI |
| 1. SILERU | 18. PEDRSAKINA |
| 2. PANULERU | 19. NAGAVALLI RIVER |
| 3. GODAVARI | 20. GUAMADIGEDDA |
| 4. SEETHAPALLI | 21. PEDDAGEDDA |
| 5. DONIGEDDA | 21j. PEDDA GEDDA |
| 5j. MANDERU | 22. ITCHA PURAM |
| 6. PRAPA AND YETIKALUVA | 23. PULIPUTTI GEDDA |
| VISAKHAPATNAM DIST. | 24. PEDDAGEDDA |
| 7. THANDAVARI | SRIRAKULAM DIST. |
| 8. ELERU | 25. POLLA GADDA |
| 9. SILERU | 26. POOTHIKA VALASA |
| 10. VARAHA | 27. GAJJILI |
| 11. SHARADA | 28. KUSIMI GEDDA |
| 12. GOSTHANI | |
| 13. CHAMPAYATHI | |
| VIJAYANAGARAM DIST. | |
| 14. VATTIGEDDA | |
| 15. VEGAVATHI | |
| 16. SWARNAMUKHI | |

- SUB-PLAN AREA
- DIST. BOUNDARY
- MANDAL BOUNDARY
- WATER SHED BOUNDARY

distributed on hill tops (30.8%), hill slopes (32.8%) and foot hills (36.4%). In Rampachodavaram, 10.6% of Podu land is on hill tops, 84.7% on hill slopes and 4.7% on foot hills is found. On the whole, the percentage distribution of Podu in the Project area is more on hill slopes (61.55%) followed by foot hills (20.6%) and hill top (17.8%) (Annexure XVIII B). The number of Podu villages in each watershed ranges from 5 to 1,380 villages. The average size of watershed in terms of villages is 79 with 1667 Podu families and Podu area of 1,382 Hectares. The watersheds are not coterminus with the existing administrative unit ie. Mandal, so also the action area and target group is also not co-terminus with the existing administrative boundaries.

The watershed area in some cases extends over two or three Mandals fully or partly, and it is also noticed that a few Mandals cover two or more watersheds. The number of Podu families in watershed areas ranges from 117 to 21,481. The watershed areas consist of multiethnic villages as well as single tribe villages. In the case of Paderu I.T.D.A., most of the watersheds consist of multi-ethnic villages, whereas in case of Seethampeta, Parvathipuram and Rampachodavaram most of the watersheds are single tribe villages.

Details of families engaged in 'Podu' and the extent of land under cultivation etc., I.T.D.A. wise and watershed-wise are given in Annexure XVIII (A) and (B).

Watersheds :

The Project area for Podu rehabilitation consists of 30 watersheds and 24 Mandals in four I.T.D.As. The Podu project Area is identified within the Sub-Plan area. Some of the features of watershed areas are described below:-

Seethampeta Podu Project Area :

The Project area of Seethampeta I.T.D.A. consists of Seethampeta Mandal with 4 watersheds. It is bounded by South Sarubujjali Mandal and Palakonda Mandal, Vizianagaram district on the North, Kothuru, Heeramandalam, Bhamini and Sarubujjali Mandals on the East and part of Seethampeta Mandal on the West. The land use pattern of Seethampeta Mandal is given below:

Sl. No.	Description	Area in Hectares	Percentage in total geographical area
1.	Total geographical area	30,321	...
2.	Forests	12,167	52.14
3.	Barren & uncultivable land	5,876	19.38
4.	Land put to non agricultural use	1,202	3.96
5.	Cultivable waste	485	1.60
6.	Permanent pastures & other grazing land	10	0.03
7.	Land under miscellaneous tree crops and groves not included in net area sown	49	0.16
8.	Current fallows	2,169	7.15
9.	Other fallow lands	620	2.04
10.	Net area sown	4,100	13.52
11.	Area sown more than once	115	0.38
12.	Total cropped area	4,215	13.90

Major portion of the geographical area (52.14%) is occupied by forests. Only 13.90% of total land is under the cultivation of tribals. Another significant feature of land utilisation is the area which is barren and uncultivable (19.38%)

Watershed : 1 Poothikavalasa :

It is bounded by Vizianagaram district on the North, Bhamini Mandal on the East, Kothuru and Seethampeta Mandals on the South

and Seethampeta Mandal on the West. The whole watershed area comes under Seethampeta Mandal with a geographical area of 7,079 hectares, 28 villages and 2,648 hectares of Podu area. The total population in this watershed area is 6,848, of which 5,540 is working force.

The extent of irrigated area in this watershed is 1,701 hectares. The common crops are Paddy in wet lands, Ragi, Jowar, Maize and Redgram in dry lands and Redgram, Banana, Turmeric and Cashew in Podu lands. The area under different crops in this watershed area is 274 Hectares; Ragi 87 hectares, Bajra 113 hectares, Jowar 18 hectares, Maize 13 hectares, Groundnut 43 hectares and 1,701 hectares under paddy.

Watershed : 2 Kusimigedda :

This watershed is also located in Seethampeta and it is bounded by Seethampeta Mandal on North, East and West and Burja Mandal on the South. The geographical area of this watershed is 1,898 hectares in 19 villages. The total population in this watershed is 5,515 of which 4415 constitutes working force. The extent of irrigated area is 62 hectares. The crop grown in this area are Paddy 62 hectares, Ragi 26 hectares, Bajra 7 hectares, Jowar 11 hectares, Maize 2 hectares and Groundnut 14 hectares. The major crops grown in Podu lands are Redgram, Banana and Turmeric.

Watershed : 3 Pollagedda :

This watershed is also in the jurisdiction of Seethampeta Mandal and bounded by Vizianagaram district on North and East

and by Seethampeta Mandal on South and West. The total geographical area of this watershed is 1,695 hectares with an extent of 894 hectares under Podu. The population of this watershed is 4,479 and the working force is 3,379. The extent of irrigated area is only 43 hectares. The major crops grown in this watershed are Paddy 43 hectares, Ragi 67 hectares, Bajra 22 hectares, Jowar 24 hectares, Maize 5 hectares and Groundnut 11 hectares. Redgram, Banana and Turmeric are mostly found in the Podu fields of this watershed.

Watershed : 4 Gajjilgedda :

This watershed is located in Seethampeta Mandal covering 869 hectares of geographical area in 13 villages with a total population of 2,247, as against 1,747 working force. The boundaries of this watershed are Seethampeta Mandal on North, Heeramandalam and Burja Mandals on the East, Palakonda on the South and Seethampeta on West. The irrigated area in this watershed is only 38 hectares. The popular crops cultivated in this watershed area are Paddy 38 hectares, Ragi 20 hectares, Bajra 2 hectares, Jowar 8 hectares, Maize 2 hectares, and Groundnut 5 hectares. Redgram, Banana and Turmeric are grown in 441 hectares of Podu land.

Parvathipuram Podu project Area :

The Podu Project Area is identified in 6 Mandals of the tribal sub-plan area. It has 12 watersheds with 266 Podu villages. The project area consists of Podu families scattered throughout the 6 Mandals.

Watershed : 1 Gummadigedda :

This watershed is located in Gummalakshmpuram Mandal with total geographical area of 2,699 hectares. It is bounded

by Pedagedda Micro watershed-1 and G.L. Puram Mandal on the East, Nagavali Micro watershed and G.L. Puram Mandal on the West, Orissa State on the North and Kurupam Mandal on the South. The total Scheduled Tribe population in this watershed is 8,564 and the Podu families are 679. The important crops grown in this area are Paddy(146 hectares), Redgram (664 hectares), Ragi (950 hectares), Mesta (140 hectares), Jowar (94 hectares) and Redgram with mixed cropping in Podu fields (679 hectares).

Watershed : 2 Pedagedda :

It is situated in Jiyyamvalasa Mandal with a geographical area of 3,961 hectares. The boundaries of this watershed are Srikakulam district on East and South, Vattigedda watershed and Kurupam Mandal on West and Kurupam Mandal on North. It covers 20 villages with Scheduled Tribe population of 6,163. The cropping pattern is Paddy (861 hectares), Redgram (585 hectares), Ragi (1,240 Hectares), Jowar (93 hectares) and Redgram with mixed cropping (520 hectares). The number of Podu families is 1208.

Watershed : 3 Pedagedda-I :

It is in Gummalakshmpuram Mandal having 45 villages with Scheduled Tribe population of 10,099 and bounded by Pedagedda-II on East, Orissa State on West and North and Kurupam Mandal on South. The total geographical area of this watershed is 3,276 hectares. The crops cultivated in this area are Paddy (204 hectares), Redgram (746 hectares) Ragi (1,265 hectares), Mesta (243 hectares) and Redgram with mixed crops (1,200 hectares). The total Podu families in this watershed area are 1049.

Watershed : 4 Itchapuram gedda :

This watershed is located in Kurupam Mandal and bounded

by Srikakulam district on East and North, Kurupam Mandal on West and Chittigedda on South. It covers 23 villages with geographical area of 4,067 hectares. The Scheduled Tribe population in this watershed is 5,187 and the families depending on Podu are 979. The important crops grown are Paddy (188 hectares) Redgram (779 hectares), Ragi (1,545 hectares), Mesta (128 hectares), Jowar (104 hectares) and Redgram with mixed cropping (750 hectares).

Watershed : 5 Nagavali river :

It is situated in Gummalakshmpuram Mandal covering 24 villages with boundaries of Gummadigedda watershed on East, Orissa State on West and North and Komarada Mandal on South. The total geographical area is 1,244 hectares with a total Scheduled Tribe population of 4,242. The number of Podu families in this watershed area is 777. The cropping pattern is redgram (406 hectares), Ragi (461 hectares), Mesta (17 hectares), Jowar (24 hectares) and Redgram with mixed cropping (249 hectares).

Watershed : 6 Gomukhi :

This is in Saluru Mandal covering total geographical area of 4,570 hectares in 22 villages. It is bounded by Makuva Mandal on East, Orissa State on West and North and Saluru Mandal on South. The Scheduled Tribe population in this watershed is 7,359 and the number of Podu families is 504. The important crops raised are Paddy (184 hectares), Redgram (805 hectares), Ragi (1,402 hectares) Mesta (89 hectares) and Jowar (140 hectares).

Watershed : 7 Vegavathi :

This watershed is located in Pachipenta Mandal and bounded

by Kuragedda on East, Orissa State on West, Saluru Mandal on North and Vottigedda on South. It covers 13 villages and the geographical area is 3,579 hectares. 538 families are depending on Podu and the crops grown are redgram (737 hectares), Ragi (1,249 hectares), Bajra and Jowar (193 hectares), Paddy (42 hectares), and pulses (88 hectares). The total Scheduled Tribe population in this watershed is 4,673.

Watershed : 8 Puliputtigedda :

It is situated in Kurupam Mandal and geographical area is 939 hectares. The boundaries are Hills on East, Podigedda on West, Itchapuramgedda on North and Chittigedda on South. Altogether 22 villages are covered with Scheduled Tribe population of 5,062. Podu families in this area are 696. The main crops are Paddy (104 hectares), Ragi (594 hectares), Redgram (272 hectares), Jowar (60 hectares), Pulses (25 hectares).

Watershed : 9 Vattigedda :

This watershed covers 15 villages of Pachipenta Mandal with geographical area of 6,940 hectares. It is bounded by Mentada Mandal on East, Araku valley on West, Hills on North and Visakhapatnam district on South. The Scheduled Tribe population is 3,710 and the number of families depending on Podu is 462. They are cultivating crops like Paddy (29 hectares), Redgram (501 hectares), Ragi (928 hectares), Bajra and Jowar (85 hectares), Ragi (928 hectares) and Pulses (31 hectares)

Watershed : 10 Suvarnamukhi :

It is in Saluru Mandal covering 11 villages and bounded by Part of Saluru Mandal on East, Orissa State on West, Gomukhigedda on North and Vegavathigedda on South. The total geographi-

cal area is 3,323 hectares. 483 families are depending on Podu cultivation. The Scheduled Tribe population is 4,236. The main crops are Paddy (85 hectares), Redgram (258 hectares), Ragi (476 hectares), Mesta (30 hectares) and Bajra (40 hectares).

Watershed : 11 Pedagedda-II :

This is located in Gummalakshmpuram Mandal covering 18 villages with geographical area of 2,690 hectares. The boundaries are Orissa State on East and North, Peddagedda river on West and Elwinpeta on South. 5,059 Scheduled Tribe population and 433 Podu families are in this area. The crops raised are Paddy (155 hectares), Redgram (677 hectares), Ragi (1,259 hectares) and Mesta (150 hectares).

Watershed : 12 Pedasakakondagedda :

It is in Komarada Mandal and bounded by Nagavali river on East, hill on West, Orissa State on North and Parvathipuram Mandal on South. 25 villages are in this watershed with geographical area of 3,391 hectares. Podu families are 464 and the Scheduled Tribe population is 5,906. The crops are paddy (303 hectares), Redgram (504 hectares), Ragi (1,078 hectares), Jowar (59 hectares) and Redgram with mixed cropping (262 hectares).

Paderu Podu project Area :

The Project area in Paderu I.T.D.A. consists of 7 watersheds spreading over 11 Mandals with a total geographical area of 6,22,360 hectares. The boundaries of Podu Project Area almost coincide with the I.T.D.A. area/^{which} consists of 1816 villages covering 25,383 families with an area of 21529 hectares. The Project area is bounded by Orissa State on the North, part of Vizianagaram district and plains area of Visakhapatnam district on East and East Goda-

cal area is 3,323 hectares. 483 families are depending on Podu cultivation. The Scheduled Tribe population is 4,236. The main crops are Paddy (85 hectares), Redgram (258 hectares), Ragi (476 hectares), Mesta (30 hectares) and Bajra (40 hectares).

Watershed : 11 Pedagedda-II :

This is located in Gummalakshmpuram Mandal covering 18 villages with geographical area of 2,690 hectares. The boundaries are Orissa State on East and North, Pedagedda river on West and Elwinpeta on South. 5,059 Scheduled Tribe population and 433 Podu families are in this area. The crops raised are Paddy (155 hectares), Redgram (677 hectares), Ragi (1,259 hectares) and Mesta (150 hectares).

Watershed : 12 Pedasakakondagedda :

It is in Komarada Mandal and bounded by Nagavali river on East, hill on West, Orissa State on North and Parvathipuram Mandal on South. 25 villages are in this watershed with geographical area of 3,391 hectares. Podu families are 464 and the Scheduled Tribe population is 5,906. The crops are paddy (303 hectares), Redgram (504 hectares), Ragi (1,078 hectares), Jowar (59 hectares) and Redgram with mixed cropping (262 hectares).

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vari and part of Visakhapatnam dist. on South & East Godavari and Orissa State on the West. The altitude ranges from maximum 5396 feet to a minimum 400 feet. The land use pattern in the 11 Mandals covered by 7 watersheds is as follows :

Sl. No.	DESCRIPTION	Area in Hectares	Percentage
1.	Total geographical area	6,22,360	
2.	Area under forests	4,01,419	64.5
3.	Barren and unclutivable land	1,17,166	18.8
4.	Land put to non-agricultural use	8,138	1.3
5.	Cultivable waste	4,755	0.8
6.	Permanent pastures and grazing land	2,963	0.5
7.	Land under Misc. tree crops and grazing lands	4,975	0.8
8.	Other fallows	2,820	0.5
9.	Current fallows	12,664	2.0
10.	Net area sown	65,434	10.5
11.	Total cropped area	90,533	14.5
12.	Area sown more than once	25,341	4.1

Forests occupy maximum geographical area (64.5%) followed by Barren and uncultivable land (18.8%), cropped area (14.5%) and area sown (10.5%). The details of each watershed are as follows :

Watershed : 1 Sileru

This watershed covers some part or other of all the Mandals of the agency tract except Koyyuru. It is bounded by part of Araku Valley Mandal on the East, Orissa State on North and West and Koyyuru, part of Chintapalli, G. Maudgula and Hukumpeta Mandals on the South. The total geographical area of this watershed is 4,34,167 hectares with 1,380 villages. There are altogether 21,481 Podu families having Podu area of 16,972 hectares.

Watershed : 2 Sarada :

The boundaries of this watershed are part of Anantagiri Mandal on the East, part of G. Madugula Mandal on the West and part of Paderu and Hukumpeta Mandal on the North, Cheedikada and V. Madugula Mandals on the South. It spreads in an area of 65,968 hectares covering 220 villages. 1,839 Podu families are cultivating 1,872 hectares of Podu land.

in an area of 65,968 hectares covering 220 villages. 1,839 Podu families are cultivating 1,872 hectares of Podu land.

Watershed : 3 Gosthani :

Only two Mandals viz., part of Arakuvalley and Ananthagiri come under this watershed. The boundaries of this watershed are Vizianagaram district on the East, part of Arakuvalley, Dumbriguda and Hukumpeta Mandals on the West, Orissa State on the North and Devarapalli Mandal on the South covering total geographical area of 48,209 Hectares. The total Podu families are 817, cultivating 1,485 hectares of Podu land.

Watershed : 4 Thandava :

The total geographical area of this watershed is 35,822 hectares covering part of Koyyuru Mandal. This forms Southern most tip of I.T.D.A. area. The boundaries of this watershed are Golugonda and Nathavaram Mandals on the East, part of Koyyuru Mandal on the West, Chintapalli Mandal on the North and East Godavari district on the South. 482 Podu families in 36 villages of this watershed are depending on Podu cultivation in an extent of 441 hectares.

Watershed : 5 Yeleru :

It is in Koyyuru Mandal and bounded by part of Koyyuru Mandal on the East, East Godavari district on the South and West and Gudemkothaveedhi Mandal on the North. The geographical area of this watershed is 21,972 hectares covering 26 villages. 509 families are depending on Podu with 469 hectares of Podu land.

Watershed : 6 Champa :

The total villages of this watershed are 16, bounded by Vizianagaram district on East and South, part of Ananthagiri on West and Orissa State on North. The Podu families in this area are 117 with an extent of 152 hectares of Podu.

Watershed : 7 Varaha :

This watershed covers Eastern part of Koyyuru Mandal with a geographical area of 16,219 hectares. Its boundaries are Paderu, V. Madugula and Ravikamatham Mandals on the East, Chinthapalli and part of Koyyuru Mandals on the West, Rolugunda Mandal on South and G.Madugula Mandal on North. Only 10 villages are in this watershed with 138 hectares of Podu land.

Rampachodavaram Podu Project Area :

The Podu Project Area in Rampachodavaram I.T.D.A. consists of 7 watersheds with 204 Podu villages. It is bounded by parts of Rampachodavaram, Y.Ramavaram, Addateegala and Prathipadu Mandals on Southern side, Orissa State and Visakhapatnam district on Northern side, part of Visakhapatnam district and Kotananduru Mandal of East Godavari district on the Eastern side, Khammam district and the river Godavari on the Western side. The land use pattern in the identified project area is given below:

Sl. No.	Description	Area in Hectares	Percentage
		6,60,109	-
1.	Total geographical area	4,20,524	63.7
2.	Forests	28,216	4.3
3.	Barren and cultivable waste	68,324	10.4
4.	Gross cropped area	62,262	9.4
5.	Net area sown	6,262	0.9
6.	Area sown more than once		

The area under forests constitutes 63.7% to the total geographical area. The net area sown is 9.4%.

Watershed : 1 Seethapalli :

This watershed is bounded by Y. Ramavaram Mandal on the East, Addateegala Mandal on the West, Devipatnam Mandal on the South and Gangavaram Mandal on the North. The Scheduled Tribe population in this watershed area is 45,797. The total geographical area of this catchment is 1,52,596 hectares with 66 villages and 3,237 families. The total Podu villages in this watershed is 58 and the extent of Podu is 2,598 hectares. The extent of area cropped more than once is 138 hectares.

Watershed : 2 Pamuleru :

This watershed covers 3 Mandals viz., Y. Ramavaram, Maredumilli and Rampachodavaram with a geographical area of 2,30,690 hectares. It is bounded by Y. Ramavaram Mandal on East and North, Khammam district on the West and the river Godavari on South. The total Scheduled Tribe population of this watershed is 49,566. The area under Podu is 1931 hectares in 58 villages. The net area sown is 15,000 hectares whereas the area sown more than once is 1853 hectares.

Watershed : 3 Sileru :

The Sileru watershed is under the jurisdiction of Y. Ramavaram Mandal with a geographical area of 49,425 hectares in 40 Podu villages. The boundaries of this watershed are Visakhapatnam district on East, Maredumilli Mandal on West, Rampachodavaram on South and Orissa State on North. The Scheduled Tribe population in this watershed area is 17,264. The area under Podu is 1,172

Hectares

The area under forests constitutes 63.7% to the total geographical area. The net area sown is 9.4%.

Watershed : 1 Seethapalli :

This watershed is bounded by Y. Ramavaram Mandal on the East, Addateegala Mandal on the West, Devipatnam Mandal on the South and Gangavaram Mandal on the North. The Scheduled Tribe population in this watershed area is 45,797. The total geographical area of this catchment is 1,52,596 hectares with 66 villages and 3,237 families. The total Podu villages in this watershed is 58 and the extent of Podu is 2,598 hectares. The extent of area cropped more than once is 138 hectares.

Watershed : 2 Pamuleru :

This watershed covers 3 Mandals viz., Y. Ramavaram, Maredumilli and Rampachodavaram with a geographical area of 2,30,690 hectares. It is bounded by Y. Ramavaram Mandal on East and North, Khammam district on the West and the river Godavari on South. The total Scheduled Tribe population of this watershed is 49,566. The area under Podu is 1931 hectares in 58 villages. The net area sown is 15,000 hectares whereas the area sown more than once is 1853 hectares.

Watershed : 3 Sileru :

The Sileru watershed is under the jurisdiction of Y. Ramavaram Mandal with a geographical area of 49,425 hectares in 40 Podu villages. The boundaries of this watershed are Visakhapatnam district on East, Maredumilli Mandal on West, Rampachodavaram on South and Orissa State on North. The Scheduled Tribe population in this watershed area is 17,264. The area under Podu is 1,172 Hectares

Watershed : 4 Godavari :

This watershed covers Devipatnam and Rampachodavaram Mandals with a geographical area of 7,092 hectares with 25 Podu villages. It is bounded by Rampachodavaram in the East, River Godavari on West and South, Maredumilli on North. The area under Podu is 882 hectares.

Watershed : 5 Rampa :

This watershed covers 11 Podu villages of Prathipadu (3), Kotananduru (4) and Sankhavaram (4) Mandals. It is bounded by Tuni Mandal on the East, Rajavommangi on the West, Prathipadu on the South and Visakhapatnam district on the North. The geographical area of this watershed is 8703 hectares with 364 hectares under Podu. The total Scheduled Tribe population is 8665.

Watershed : 6 Yetikalva :

This watershed comes under Prathipadu Mandal with geographical area of 16,425 hectares with a total Scheduled Tribe population of 3,853 in 5 villages. It is bounded by Kotananduru Mandal on East, Rajavommangi on West, Pitapuram Mandal on South and Visakhapatnam district on North. The area under Podu is 165 Hectares.

Watershed : 7 Vanchangi :

This watershed falls under Rajavommangi Mandal with a geographical area of 9,291 hectares with 140 hectares of Podu area in 7 villages. It is bounded by Kotananduru Mandal on East, Addateegala Mandal on West, Prathipadu Mandal on South and Visakhapatnam district on North. The Scheduled Tribe population in this Mandal is 16,027.

To sum up, the Podu Project Area is identified in the Sub-Plan area of Seethampeta (Srikakulam district), Parvathipuram (Vizianagaram district), Paderu (Visakhapatnam District) and Rampachodavaram (East Godavari District).

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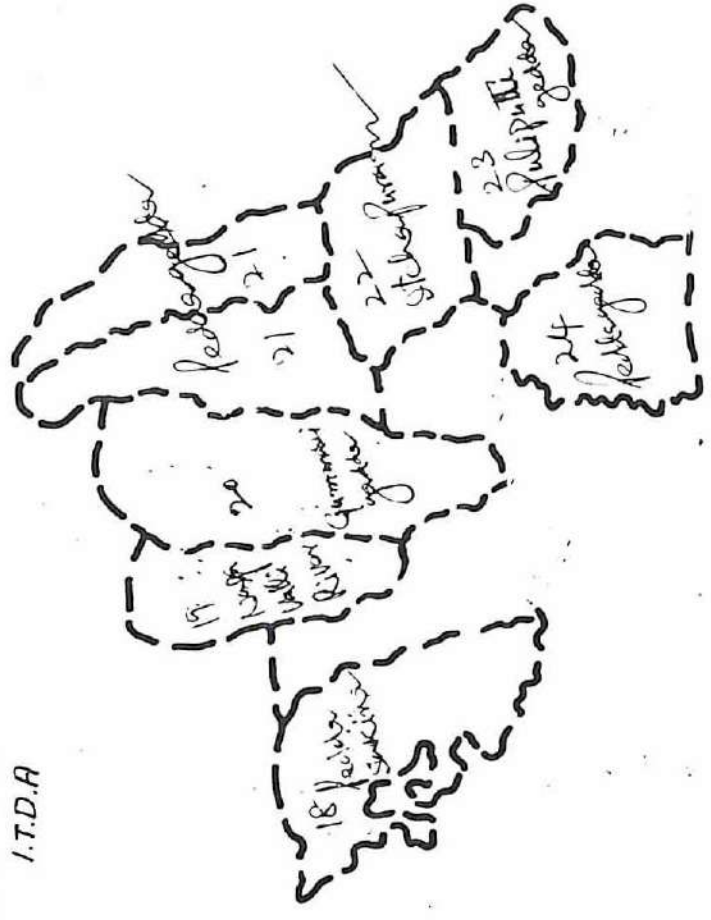
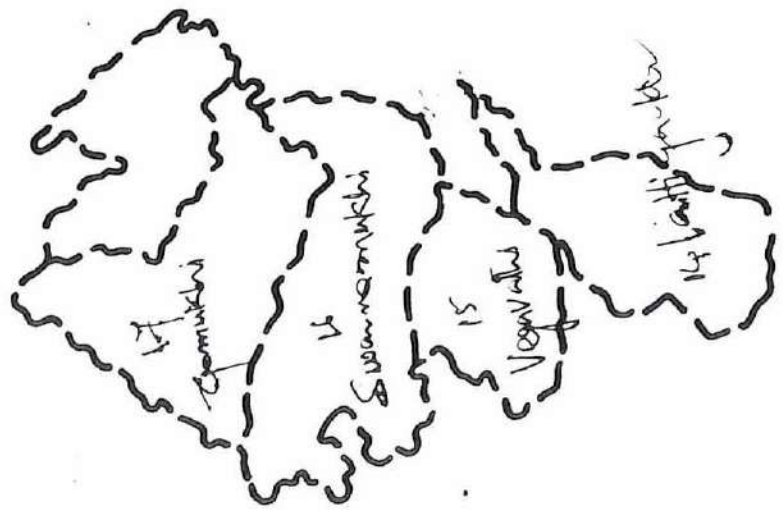
SRIKAKULAM DISTRICT

WATER SHEDS

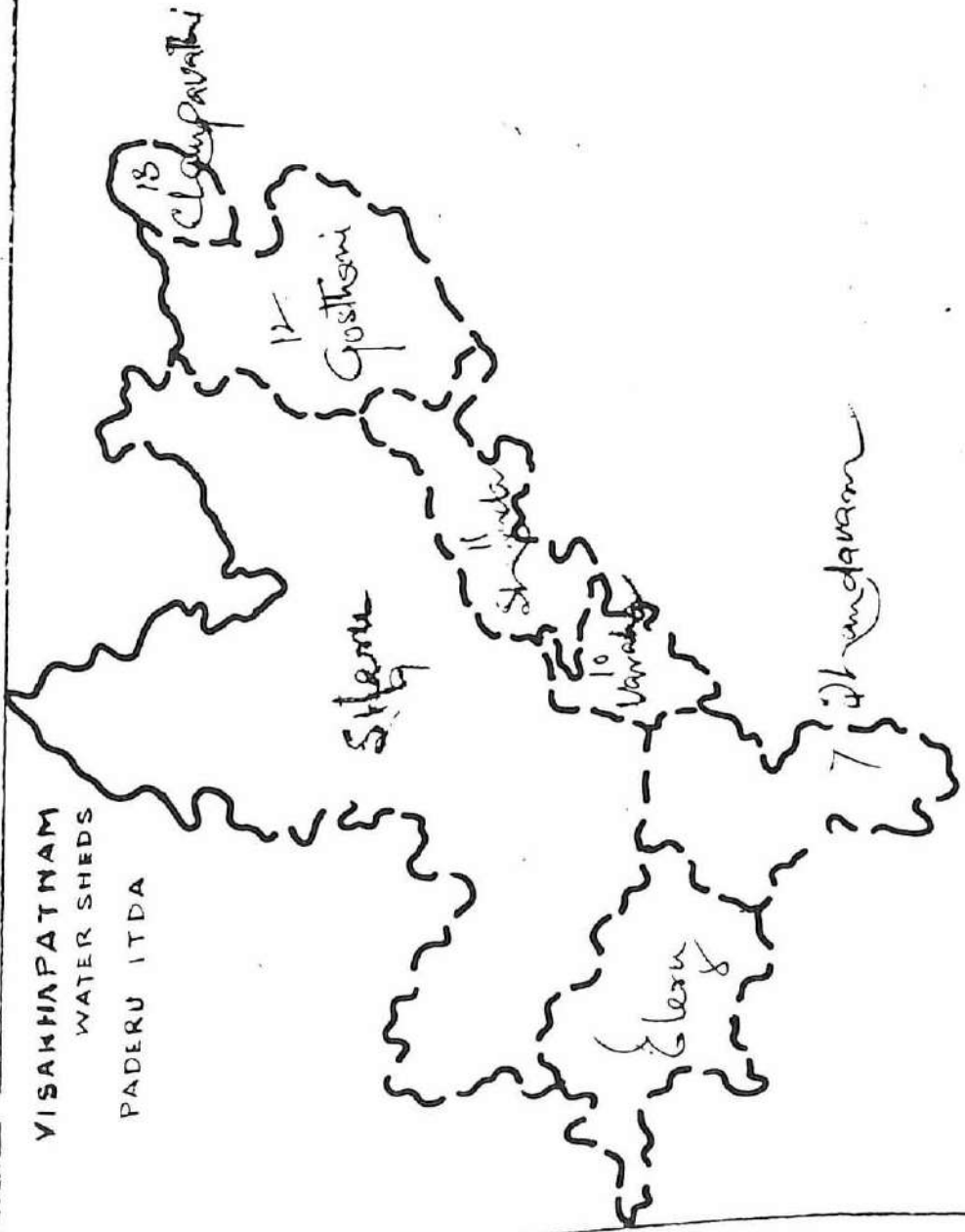
SEETHAMPET MANDAL



VIZIANAGARAM DISTRICT
WATER SHEDS
PARVATHIPURAM
I.T.D.A



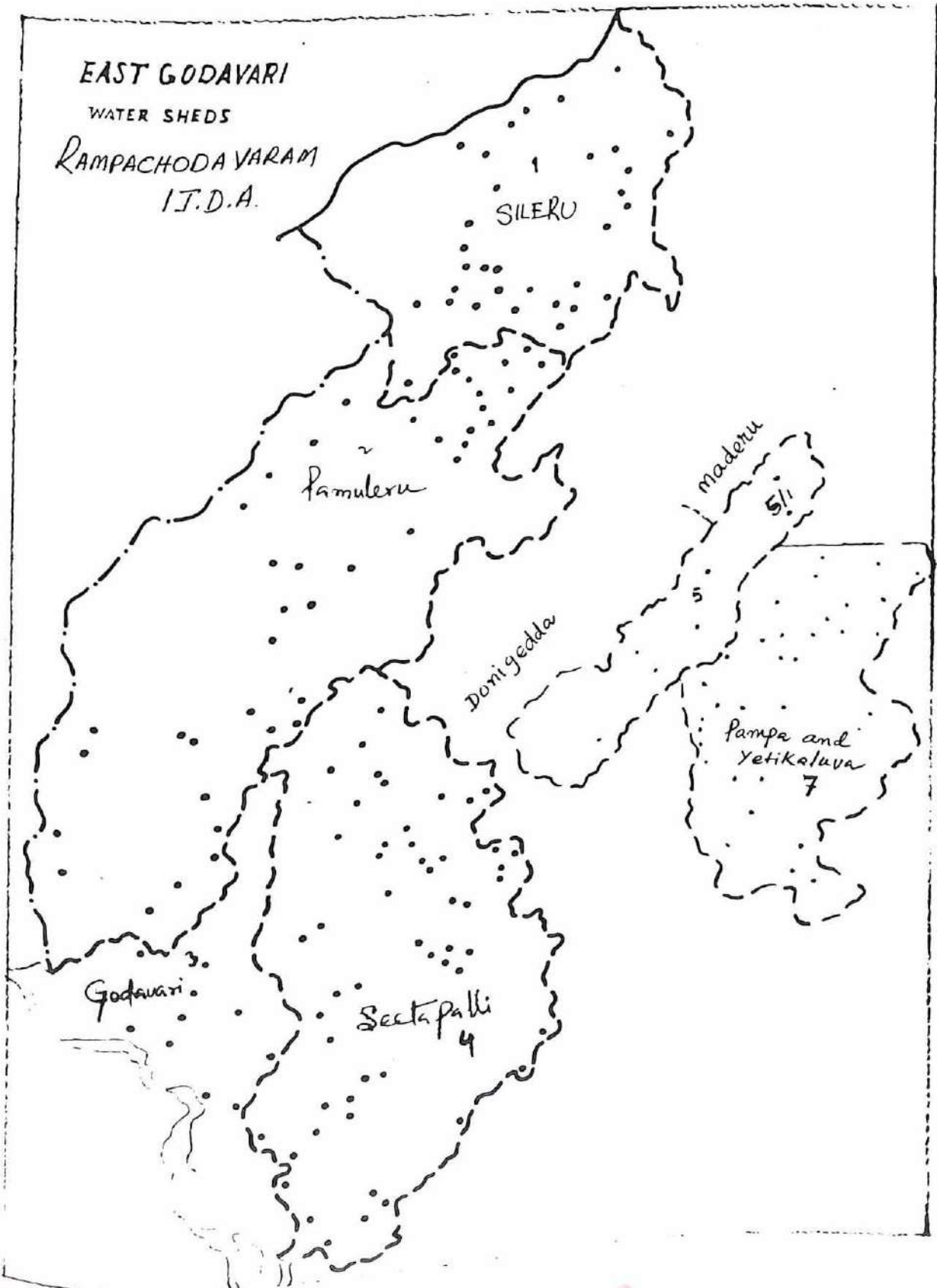
VISAKHAPATNAM
WATER SHEDS
PADERU ITDA



EAST GODAVARI

WATER SHEDS

RAMPACHODAVARAM
I.T.D.A.



PROJECT COMPONENTS

For a project of this nature it is very essential to plan carefully for enlisting whole-hearted co-operation of tribals and sustain their interest and participation throughout. This is possible only if the planning is done for optimal utilisation of the human and natural resources in tribal areas. The programmes like Horticulture or Social Forestry envisaged in this plan have been in implementation for the last 4 years. The results are very encouraging. It is evident that if proper planning is done and viable programme is offered / ^{to tribals,} they do not lag behind. Higher Priority is therefore given to Horticulture/Social Forestry programme, with due emphasis on improving the productivity of land through various other measures.

A. Survey and Land Records :

No regular survey had been attempted to demarcate individual holdings in the tribal area, as such even the village boundaries were not clearly demarcated. It is now necessary that village boundaries, and reserve forests are systematically surveyed without further loss of time. Although survey of land under possession of tribals has been done and large number of pattas are given to them, still a lot more remains to be done, the survey records have to be built up on systematic lines.

The Scheduled villages of Parvathipuram I.T.D.A. were partly surveyed and settled. The Reserve Forest boundaries and village boundaries were not fixed in these villages. Only settled cultivation was mapped and measured leaving aside vast extents of unreserve forests and unoccupied lands

In Seethampeta agency area survey operations were taken up in 108 villages and the work was divided into three parts.

1. In the first part joint verification of common boundaries between Reserve forest blocks and un-reserve forest blocks were identified in 45 villages with a length of 101 kms.
2. Identification, demarcation and measurement of village boundaries for each scheduled village was taken up in 73 villages and so far the work is completed in 66 villages.
3. Internal survey operations were completed in 103 villages and the area measured was 10,634.73 hectares.

Under 'Telugu Girijana Magana Samaradhana' programme 4857.48 hect. of Podu land was surveyed and 'D' form pattas were given to 8202 beneficiaries in 83 villages.

Survey and settlement operations are yet to be completed in Paderu and Rampachodavaram I.T.D.A. Areas.

Staff requirement for this purpose is as follows :

	<u>No. of posts</u>
1. Asst. Director of Survey & Land Records	1
2. Survey Inspectors	2
3. Deputy Inspectors of Survey	1
4. Office Superintendent	1
5. Senior Draughtsman	2
6. Senior Assistants	20
7. Surveyors	54
8. Deputy Surveyors	4
9. Draughtsman Grade I	2
10. Junior Assistants	1
11. Typist	14
12. Chainman	1
13. Jeep with Driver	1
14. Night Watchman	1

For this purpose an amount of Rs. 4.575 millions has been proposed. The details of recurring and non-recurring expenditure are furnished in Annexure XIX.

The financial estimates for updating land records in the Action Areas are given below:

Sl. No.	Name of the I.T.D.A.	Total amount required		
		IFAD	STATE share	Total
		<u>Rupees in Millions</u>		
1.	Seethampeta	0.020	0.080	0.100
2.	Parvathipuram	Nil	Nil	Nil
3.	Paderu	Nil	Nil	Nil
4.	Rampachodavaram	0.915	3.660	4.575
Total		0.935	3.740	4.675

It is estimated that an amount of ^{Rs.} 4.675 million would be required for up-dating of land records in the agency areas.

Soil Conservation :

On account of denudation of the forests, lands are subjected to severe erosion. Appropriate Soil Conservation measures are to be taken up to better the condition of the lands. The following measures are suggested.

(1) Stone bunding and earthen bunding systems have their own disadvantages i.e. every year they have to be maintained by making necessary repairs. In its place vegetation bunding has been suggested. Vettiver grass is proposed to be planted in rows along the contours. After attaining one year's growth, it serves as a perfect bund. It does not deteriorate over years, on the other hand it gets strengthened year after year while protecting the land from erosion.

2. Gully Control measures : When water is allowed to go un-briddled it forms gullies causing severe damages. Stone packing is therefore, done to regulate the flow of water at points of vulnerability. For this purpose a provision is made to control gullies by stone packing with the stone available nearby. Annexure XX(A)
3. Diversion Drains : The water is allowed to flow along the contour at the foot hills and connected to a natural drain so that the velocity of run off water is regulated and drained into natural streams without causing great damage. Provision is made for this purpose in the plan. Annexure XX (B)
4. Water Harvesting Structures : The run off water always joins nearby drains and in the course of flowing with velocity causes severe damage. If all such courses are diverted into a small pond called 'Water Harvesting Structure', the water can be stored for sometime which can be used for raising nurseries or for minor irrigation purposes. Provision is therefore made to plan for construction of Water Harvesting Structures. (Design given in Annexure-XX.(C).)

All these together go a long way in preserving top soil, fertility and retaining moisture, ultimately contributing for increased crop yields.

For taking up soil conservation measures the area available, the area already treated, balance area to be treated, area proposed to undertake various works are identified. In Seethampeta project area the soil conservation measures like graded bunding, stone terracing, bench terracing, gully construction works were suggested in all four watersheds. Gully construction works were not suggested for Pollagedda watershed (Annexure XX-D)

Soil conservation measures like Vettiver planting, gully structures, diversion drains, formation of Water Harvesting Structures, etc. are proposed in Parvathipuram, Paderu and Rampachodavaram sub-plan areas.

The financial estimates for each ITDA area towards different soil conservation measures are given below together with physical targets (For details see Annexure XXI)

Rs. in Millions					
Sl. No.	Podu Project Area	Area proposed (Hc.)	Total amount Required		
			IFAD	Stateshare	Total
1.	Seethampeta	5,282	6.34	1.58	7.92
2.	Parvathipuram	15,171	16.17	4.03	20.20
3.	Paderu	4,597	3.63	0.91	4.54
4.	Rampachodavaram	14,031	3.69	0.94	4.63
Total		39,081	29.83	7.46	37.29

An amount of Rs. 37.29 millions would be required for undertaking different soil conservation measures in 30 identified watersheds of the Podu Action Areas. (Annexure XXI-A)

C. Scheme for Development of land under Shifting Cultivation:

Social Forestry taken up under different schemes is a step in right direction. It has not only given a boost to tribal by way of wages for the work done by him for his own betterment but has also ensured his participation in its implementation. The area covered is 9844 hecs. in four I.T.D.As.

In the past, efforts have been successful in implementing social Forestry programmes as exemplified in East Godavari District.

A conscious effort has been made to take this programme to the people in ITDA, Rampachodavaram as detailed here. Some of the remotest villages were identified with the entire village as a unit and care has been taken to cover all the tribal families in these villages. The landless poor were assigned available Government lands. Immediately after finalising the list of villages a series of meetings were organised in the villages to explain the various aspects of the programme and elicit their response.

The main features of the scheme are as follows:

1. The programme is taken up on the own land of tribals.
2. It is also taken up on assigned lands by regulating right on land by issuing a patta to a tribal.
3. The tribal is also allowed to grow plantations on Podu lands.
4. Each tribal farmer grows horticultural plantations in an area of 2.00 acres with fruit plants and planting other economic trees like soapnuts, drumsticks etc., covering 0.50 acres.
5. Nurseries for supply of required plant materials have been raised as near as possible to the villages and in many cases in the village itself. Cashew and other nurseries have been raised in poly bags by each farmer in his own backyard, thus minimising transportation.
6. The fruit plants included cashew, mango, citrus (lime and kamala and guava etc., as per the choice of the tribal.
7. The other plants include soapnuts, drumsticks, seethaphal, bamboo, 'Burugu', tamarind and palmyrah etc., as detailed below:

<u>Variety</u>	<u>No. of plants</u>
1. Soapnuts	50
2. Drumsticks	20
3. Seethaphal	50
4. Bamboo	200
5. Burugu	50
6. Tamarind	5
7. Palmyrah/Bamboo	200

8) Every beneficiary is paid Rs.100 a month towards maintenance of orchards including weeding, mulching, plant protection including protecting the plants from stray cattle etc. This amount is required to meet the labour input put forth by the farmer in maintaining the garden. However, this is paid only when he ensures 75% survival of the plants.

9) Inspection of the plantations is done periodically (once a fortnight) by trained tribal workers under the supervision of Mandal Development Officer.

10) Every payment made to the beneficiary is only through the Bankers by getting individual S.B. Accounts opened by the beneficiary in the Bank.

11) Each beneficiary is given an identity card specifying the cost of the scheme, inputs delivered and amount paid etc. The funds released under subsidy and margin money are deposited by ITDA in the Banks (to which the villages are tagged). Payments are made by the Bank on the recommendation of Mandal Development Officer concerned on completion of each item of work.

Horticulture Programme :

The suggested programmes under social forestry and Horticulture in different watershed areas are discussed hereunder:

In Parvathipuram Podu Project Area, horticulture programmes and suitable species with mix of Minor Forest Produce are suggested. Fruit-bearing trees like cashew and mango which come up very well in the proposed Podu area were recommended with minor Forest Produce species like Usiri, Mohwa, Tamarind, Soapnut etc. In addition to these it is proposed to cover same areas under mandarin oranges, pomegranates and guava as the soils and climate are suitable for the plantation of these species. The tribals will be advised to inter-cultivate food crops and pulses during gestation period to prevent soil erosion and to sustain themselves.

In Seethampeta area an economic mix of plantations is suggested to tackle the development of land under Podu cultivation. Cashew (7m. x 7m.) 196 plants, Custard apple (2.5m x 2.5m.) 144 plants, Acacia (2m. x 2m.) 80 plants; Yegisa, Nallamaddi, Teak 80 plants, totalling 500 plants were suggested.

The mix of plantations in Paderu Podu Project Area under Social Forestry - Horticultural programmes are designed as follows to suit the different altitudes.

Elevation 0-900'		900-2000'		2000' and above	
Coconut	60 Hc.	Cashew	60 Hc.	Cashew	100 Hc.
Mango	40 hc.	Guava	20 Hc.	Guava	50 Hc.
Sapota	20 Hc.	Custard apple	100 Hc.	Silveroak	100 Hc.
Guava	20 Hc.	Pomegranate	40 Hc.	Pomegranate	40 Hc.
Soapnut	40 Hc.	Mango	40 Hc.	Bamboo	150 Hc.
Subabul	40 Hc.	Subabul	100 Hc.	Litchi	20 Hc.
Bamboo	150 Hc.	Silveroak	50 Hc.		

In 7 water sheds of Rampachodavaram project area rubber plantations, Economic Plantation, Orchards, Pepper, Coffee, Citternella are suggested besides other plantations.

The physical and financial target under horticultural programmes for Podu cultivators are shown below:-

RS. IN MILLIONS

S.No.	Podu Action Area	No. of water sheds	No. of beneficiaries	extent OF LAND to be covered.Hcs.	TOTAL AMOUNT REQUIRED		
					IFAD	state share	Total
1.	Seethampeta	4	8910	5282	36.22	9.06	45.28
2.	Parvathipuram	12	8695	7396	51.43	12.85	64.28
3.	Paderu	7	7488	6149	65.42	16.36	81.78
4.	Rampachodavaram	7	6871	6046	52.85	13.21	66.06
Total		30	31,964	24,873	205.92	51.48	257.40

The Unit Cost and yearwise phasing is given in Annexure No. XXII

Altogether an amount of Rs. 257.40 millions would be required towards schemes suggested for development of land under Podu cultivation. For Watershed-wise details see (Annexure XXIII & XXIII-A.)

D. SCHEME FOR INCREASING PRODUCTIVITY OF LANDS OF PODU

CULTIVATORS :

The Podu survey undertaken by different ITDAs reveal that the Podu cultivators are in possession of dry and wet lands in valleys besides Podu lands. It is imperative to improve the productivity of dry and wet lands in possession of Podu cultivators in order to enhance their economic status. With this objective in view, certain programmes like seed flushing (seed exchange), irrigation facilities, systematic land development etc. are suggested. The details of Dry and Wet lands held by Podu cultivators are given below:-

S.No.	Podu Project Area	No. of Podu families	Extent of land			Average size of land holding	
			Dry	Wet	Total	Dry	Wet
1.	Seethampeta	9051	741	1844	2585	0.08	0.20
2.	Parvathipuram	8696	5559	771	6330	0.64	0.09
3.	Paderu	25,383	21,159	370	21,529	0.83	0.01
4.	Rampachodavaram	6871	5955	149	6104	0.87	0.02
Total		50,001	33,414	3134	36,548	0.67	0.06

(Please See Annexure XXIV for Details)

The Podu cultivators possess dry and wet lands to the tune of 36,548 hectares of which dry land holding is 33,414 hectares. The average size of dry and wet land-holding of the Podu cultivators is 0.67 and 0.06 respectively. The dry and wet land soils are not fertile hence there is every need to improve fertility

Seed exchange programme is proposed for millets, pulses and oil seeds covering an area of 15,414 Hectares at an estimated cost of Rs.1.427 millions (IFAD share Rs. 1.15 M; State share Rs. 0.28 M. (Please see Annexure XXV and XXV-A.)

To increase the agricultural production, irrigation facilities like check dams, Tanks, C.I. Wells and L.I. Schemes are proposed and the details are as follows:-

	Number	Total Cost
	(In Rs. millions)	
	221	20.855
1. Check Dams	65	0.975
2. Tanks	292	3.780
3. C.I. Wells	22	8.900
4. L.I. Schemes	600	30.510

The details of irrigation facilities I.T.D.A. and Watershedwise are shown in Annexure XXVI A-B.

Systematic land development of wet lands is proposed on an area of 11,103 hectares at an estimated cost of Rs.28.843 millions (IFAD Rs. 23.075 millions and State share Rs. 5.768 millions). The details are given in Annexure XXVII.

The watershedwise details of the scheme proposed for improving productivity of lands are furnished in Annexure XXV to XXVII. A.

To sum up a total outlay of Rs. 65.858 millions would be required for improving the productivity of dry and wet lands owned by Podu cultivators.

E. DEVELOPMENT OF COMMUNITY SERVICES :

The availability of adequate social service facilities such as roads, education, health, transportation, communication, marketing network, etc. is prerequisite for the development of the identified Podu project area. In the absence of these facilities, any development programme initiated is likely to go awry and result in waste of investment. The problem of provision of community services is more acute in the identified Project area due to hilly terrain, highly dispersed and isolated settlement pattern of different tribal groups. The existing infrastructure facilities in Podu settlements are quite inadequate by any standard. The Podu Project Area deserves top priority in the development of social service facilities.

The provision of these facilities has been taken up as a priority task for integrated development of tribes and tribal areas. The facilities consist of providing community services in the field of education, health, electricity, housing, consumer services, etc.

Education :

The programmes like upgradation of elementary schools to Upper Primary Schools, Upper Primary Schools to High Schools, additional single teacher schools, hostels, teaching aids, educational material, adult and non-formal education centres etc. are included under the provision of community services in the field of education. The number of units under each scheme together with financial implications in the Project are given in Annexure XXVIII.

Under different programmes of education altogether an amount of Rs. 64.09 million (IFAD-Rs.12.82 millions and State-Rs. 51.27 millions) would be required towards ongoing and sanctioned schemes.

Medical & Health :

Medical facilities in terms of number of Primary Health Centres, dispensaries etc. are not adequate in tribal areas. Further, most of the hospitals and dispensaries are not having adequate apparatus and medicines. Hence, some of the programmes like new Primary Health Centres, new I.C.D.S./S.N.P. Centres, expansion or improvement of existing institutions are suggested under the provision of community services. The total amount required is estimated at Rs. 22.92 millions (IFAD - Rs. 4.58 millions + State - Rs. 18.34 millions).

Drinking Water :

Supply of drinking water in the villages has gained considerable attention as the objective is to cover a significant proportion of the villages under protected drinking water supply scheme. The implementation of the scheme in tribal areas encounters problems in view of the nature of terrain and dispersed settlement pattern. Generally the sources of drinking water in tribal areas

are the hill streams, rivers and rivulets. Some of the programmes which are being implemented, but do not have adequate funds to complete them and new schemes for provision of drinking water are suggested. The estimated outlay is Rs. 5.74 millions (IFAD - Rs. 1.15 millions + State Rs. 4.59 millions).

Housing :

Housing programme has gained momentum in recent times especially among weaker sections. The housing programmes are being undertaken under NREP, RLEGP and SPR. However, additional funds are required to supplement the finances of these schemes for accelerating the programmes. The total outlay is Rs. 70.44 millions (IFAD-Rs. 14.09 millions + State - Rs. 56.35 millions).

Public distribution :

This function is at present carried out by G.C.C. and P.D.S. depots of Civil Supplies Department. Parvathipuram, Seethampeta and Rampachodavaram Project areas are proposed to be covered for providing adequate civil supplies. An amount of Rs. 8.97 million (IFAD - Rs. 1.79 millions + State - Rs. 7.18 millions) are required.

Electricity :

Supply of electricity for domestic purpose and for energisation of pumpsets is being given in tribal areas. The total cost for provision of electricity for domestic and agricultural purposes is estimated at Rs. 30.01 millions (IFAD - Rs. 6.00 millions + State - Rs. 24.01 millions).

Civic Amenities :

In Parvathipuram and Rampachodavaram Action Area, public toilets under Vimukhti scheme and community wells are proposed at an estimated cost of Rs. 1.53 millions (IFAD - Rs. 0.31 millions State - Rs. 1.22 millions).

Roads :

Roads proposed in different Action Areas require an amount of Rs. 162.20 millions (IFAD - Rs. 32.44 millions + State Rs. 129.76 millions).

Buildings :

The programme of buildings comprises construction of school buildings, D.R. Depots buildings, Ashram School and Hostel Buildings, Staff Quarters, etc. It is estimated that an amount of Rs. 45.30 millions is required (IFAD - Rs. 9.06 millions + State Rs. 36.24 millions).

To sum up, the total amount required under various community services is estimated at Rs. 411.20 millions (Annexure XXVIII)

F. MARKETING & PROCESSING :

Perhaps the most crucial activity which can give a definite boost to tribal economy is marketing; because tribal does not always get adequate return for whatever little he produces and has to pay higher price for his daily requirements. Marketing assumes greater importance where the level of agricultural production is sought to be increased. To prevent draining away of the vitality of tribal economy the following are to be ensured :

1. Assuring fair price to the marketable agricultural produce.
2. Elimination of middlemen and merchants from outside.
3. Supply of daily requirements of tribal at reasonable prices.

The public distribution system and Girijan Co-op. Corporation are presently engaged in taking care of these factors mentioned, but still there are certain aspects of marketing which are discernably deficient. Duly identifying such deficiency areas, the following schemes are proposed.

1. Warehousing facility & Marketing yards :

It is estimated that with the introduction of new methods of cultivation and provision of inputs, there will be surplus production in the area; therefore providing warehousing facilities and establishment of market yards are proposed.

2. Standard Weights and measures :

It is observed that tribals are cheated by outsiders in their commercial transactions essentially because of tribals' ignorance and lack of weighing and measuring equipment. Hence, this has been Proposed.

3. Assistance to Tribal youth :

Tribal youth from the Project area are proposed to be given assistance to undertake small business ventures as a part of the effort to strengthen the marketing structure in the Project area.

4. Extension Education :

Audio-visual aids will be used to educate the tribals in various activities and marketing intelligence is proposed to be Provided.

5. Processing Units :

These units which are listed below are mainly intended to: (a) generate local self-employment and (b) increase the income of the tribal producer and entrepreneur. Profiles of certain processing units are given in the Annexure XXIX A

LIST OF PROCESSING UNITS

SEETHAMPETA :

1. Establishment of one cashew processing unit.
2. Installation of one unit for manufacturing of Fenney.

PADERU :

1. Flour mill for Bajra, Ragi Unit.
2. Potato chips manufacturing unit.
3. Fruit preservation unit (Tomato-Jam, Jelly & Ketchup).
4. Cold storage (500 MT) for potato, vegetables and fruits.
5. Turmeric polishing and powdering unit.
6. Ginger dehydration unit.
7. Coffee seed processing unit.
8. Pippalmodi processing unit.
9. Brick manufacturing units.
10. Stone crusher unit.
11. Citronella Extraction unit (2 M.T.) capacity.
12. Cashew, Kamala processing unit.

RAMPACHODAVARAM :

1. Scheme for manufacture of cashew kernel unit at Gangavaram.
2. Manufacture of Jelly with cashew, apple juice indigenous type.

Scheme wise financial requirements both for marketing and processing units are given in Annexure XXIX. The total amount required for both marketing programmes and processing units is Rs. 35.47 millions.

G. TRAINING PROGRAMME :

The aim is to ensure growth of human resources so as to equip the tribal with skills to exploit natural and capital resources. The need of the hour is to have a positive approach for comprehensive and integrated human resources development. The tribals have to be equipped not only with technical skills but also with moral, spiritual and other abilities, so as to enable them to utilise the new opportunities and promote their managerial and leadership qualities.

To improve the human resources in project area, training programmes are suggested taking into consideration the needs of the area and the people. Massive education campaign forms part of the programme content of each development scheme. The role of tribal women is very much recognised and their skills are proposed to be improved. Beside educating the tribals in local medicinal plants about the usage and value, the need to improve the skills of Minor Forest Produce procurement is stressed. The proposed training programmes are as follows:

Sl. No.	Training to the beneficiaries	AMOUNT REQUIRED (Rs. in Millions)		
		I.F.A.D.	State	Total
1.	Agriculture	0.824	3.324	4.148
2.	Horticulture	0.563	2.274	2.837
3.	Sericulture	0.100	0.390	0.490
4.	Minor Irrigation	0.002	0.006	0.008
5.	Animal Husbandry	0.030	0.110	0.140
6.	Medicinal Plants & M.F.P. Procurement	0.097	0.377	0.474
7.	Bee-keeping	0.045	0.170	0.215
8.	Vocational Training exclusively for women	0.070	0.280	0.350
9.	Self Employment	0.77	0.297	0.374
10.	Field trips	0.022	0.108	0.130
11.	Training in Tailoring	0.007	0.027	0.034
12.	Training in making bamboo articles	0.006	0.023	0.029
Training to Staff :				
1.	Supervisory Staff	0.002	0.008	0.010
2.	Horticulture staff	0.008	0.032	0.040
3.	Engineering & Soil conservation staff	0.010	0.040	0.050
4.	Monitoring & Evaluation staff	0.007	0.024	0.031
5.	Training to teachers in health development	0.063	0.251	0.314
6.	Training to liaison workers	0.027	0.108	0.135
		1.960	7.849	9.809

The training programmes centre round mostly land based and agro-based technology. The training programmes to beneficiaries include various methods of planting, using fertilisers, pesticides, using hybrid varieties of seed, agricultural implements etc. Under Horticulture training, emphasis is on raising nurseries, plantations, grafting etc. The training in Minor Irrigation stresses proper water management and maintenance of irrigation sources, electric motors, open wells, etc. Maintenance of Milch Cattle, fodder plants, breeding and rearing of different species of animals etc. are included in the training programme of animal husbandry. The sericulture training highlights the practices of mulberry cultivation, chawki rearing, chawki reeling, etc. Under medicinal plants and M.F.P. procurement training, scientific methods of M.F.P. procurement, warehousing, drying, grading, marketing and also cultivation of medicinal and auromatic plants are included. The vocational training programme exclusively for women includes various training camps in basket making, mango jelly making, Honey-bee keeping, knitting, plastic wire boxes, etc. The details are given in Annexure XXX. It is estimated that an amount of Rs. 9.809 Millions would be required to strengthen the human resources in the Project Area.

ADMINISTRATIVE ARRANGEMENTS AND FINANCIAL RESOURCES

Administration

The existing set up of the Tribal Welfare Department in Andhra Pradesh has the necessary expertise and capability to undertake implementation of wide range of programmes including problem oriented projects of this nature. A brief description of the existing set up of the Tribal Welfare Department is given below:-

The Department is headed by the Secretary to Government, Social Welfare Department at the State level. Below the Secretary's level, there is Director, Tribal Welfare, who is the Chief Controlling Officer, responsible for planning and monitoring the various schemes besides preparation of budget proposals to be presented to the Legislature (State) for approval. All funds meant for Tribal Welfare schemes whether implemented by the Governmental agencies, registered bodies or voluntary agencies (in receipt of Government assistance) are co-ordinated and monitored by the Director of Tribal Welfare. At the District level, the District Collector is in overall charge of implementing Tribal Welfare schemes with the assistance of various departmental officers including District Tribal Welfare Officer. There is well-established set of rules and procedures evolved over a period of time to facilitate speedy implementation of various types of programmes in tribal areas.

For areas of Tribal concentration (Sub-plan area identified in each District), 8 I.T.D.As have been established for effective co-ordination of the various specialised departments/agencies. The four I.T.D.As. viz., Seethampeta (Srikakulam), Parvathipuram (Vizianagaram District), Paderu (Visakhapatnam District), Rampachodavaram

(East Godavary District) of which the proposed Action Area will form part, have the following set-up which includes subject matter specialists.

DISTRICT COLLECTOR & CHAIRMAN OF I.T.D.A.

Project Officer										Governing body of Officials & Non-Officials			
APO & DTWO PVO	PAO	PEO	PHO	AQ (Seri)	A.D. (Agri.)	E.E. (TW)	SDC (TW)	E.O. (IND)	APO (PUB)	A.O.	S.O.	AAO	E.O Fish- eries
						M.D.Os.				M.P.Ps.			
						V.D.Os.				Panchayat Presidents			

The District Collector is the Chairman of the I.T.D.A. and the Project Officer is the Member Secretary of the Governing Body of I.T.D.A. One M.P., local M.L.As. and the Mandal Praja Parishad Presidents who have jurisdiction in the I.T.D.A. area are the members of the Governing Body. All District Officers connected with Tribal Development activities are members of the Governing Body. As per the instructions of the Government, the Governing Body has to meet atleast once in three months or as often as necessary.

On the Administrative side, the Project Officer is assisted by the District Tribal Welfare Officer who acts as Assistant Project Officer, Project Education Officer, Project Agricultural Officer, Project Horticultural Officer, Veterinary Officers, Fisheries Extension Officer and Extension Officer (Industries), Assistant Director of Agriculture, Asst. Director of Sericulture, Executive Engineer (Tribal Welfare), Assistant Project Officer (Publicity), Special Deputy Collector (Tribal Welfare) and Statistical Officer, Asst. Accounts Officer, Administrative Officer.

Action Plans are prepared annually and executed for the development of Agriculture, Sericulture, Fisheries, Minor Irrigation, Animal Husbandry and Industries, Services and business sectors every year pooling funds from State Plan including Tribal Welfare and General Sector, Centrally sponsored Schemes, Special Central Assistance and Institutional Finance.

For smooth implementation of Tribal Sub-Plan Programmes, administrative arrangements have been specially made. Important of them are as follows:

i) A State level Committee headed by the Chief Secretary to Govt., consisting Secretary to Government, Tribal/Social Welfare Department as Convenor, Principal Secretary, Finance & Planning as Member is functioning. All the Secretaries to Government and Heads of Departments are invited when their subjects are included in the agenda. This Committee is meant for co-ordination and review of Tribal Welfare Programmes.

ii) The Project Officer of I.T.D.A. are empowered to sanction works upto one lakh rupees and Chairman upto two lakhs, while I.T.D.A. Governing Body can sanction any scheme upto 15 lakhs and accept the tenders 10% over and above the estimated cost. All the functionaries both development and regulatory are placed under the administrative control of the Project Officers.

iii) It was found that the tribals have to approach several agencies for getting their needs fulfilled. The Chief Minister in a meeting held in June, 1986, agreed in principle with the proposals of the Department to make the I.T.D.A. a nodal agency by designating the Project Officer as Joint Collector (Tribal Welfare), Additional District Magistrate for implementing all developmental and regulatory functions in the Sub-Plan areas.

For the purpose of implementing the I.F.A.D. assisted PODU Project, the following arrangement is envisaged:

STATE LEVEL

1. Director, Tribal Welfare will be designated as Ex-Officio Director of I.F.A.D. Project.
2. He will be assisted by Project Liason Officer (Joint Director cadre of T.C.R. & T.I.) who will be exclusively in charge of the Project (post to be created).
3. The Joint Director (Horticulture) of Tribal Welfare Department (existing) will be designated as ex-officio Technical Officer at Macro level. Similarly the services of the Deputy Director and Horticulture Officers available at State Headquarters will also be utilised.
4. One post of Deputy Director with four monitoring Assistants will be created to monitor and evaluate the programmes.
5. Equipment:
One Jeep, an Electronic Typewriter, one Plain-paper Copier, furniture, and Telephone will be provided.

I.T.D.A. LEVEL

1. Project Officer, I.T.D.A. would be designated as ex-officio Project Director, I.F.A.D., Podu Project in each Integrated Tribal Development Agency.
2. One post of Assistant Director (Podu Development) will be created in each I.T.D.A.
3. The existing monitoring units in I.T.D.As. will be strengthened. Two posts of Monitoring Officers one each to I.T.D.A., Seethampeta and Parvathipuram will be created (Statistical Officers posts exist in the remaining 2 ITDAs.)

4. Four Monitoring Assistants posts will be created to be exclusively in charge of monitoring work relating to this Project.
5. Other Sectoral Officers (Subject matter specialists) of ITDA will be in charge of their respective programmes in the Project area.
6. One Jeep will be provided.
7. One post of Deputy Director (Podu Evaluation) and two R.Os. posts will be provided to the Regional Centre Paderu.

FIELD LEVEL

1. Field Assistants (Sub-Assistants):

Posts of Field Assistants will be created at the rate of one for every ten villages. The posts of Sub-Assistants will be reserved for educated tribals preferably from the tribes practising Podu. They will be given short duration preliminary training and will be continuously trained for performing each task to be executed with the help of farmers (Podu Cultivator) according to the Calender of operations. Appointment of tribals as Field Assistants, it is hoped, will enhance the capability of the delivery system:

	<u>NO. OF VILLAGES</u>	<u>NO. OF FIELD ASSISTANTS</u>
<u>I.T.D.A.</u>		8
1. Seethampet	80	27
2. Parvathipuram	266	182
3. Paderu	1815	<u>20</u>
4. Rampachodavaram	<u>204</u>	237
	2365	

(for Details see ANNEXURE XXXI)

FINANCES

One of the objectives of the Sub-Plan is to achieve financial integration by way of pooling of funds from different departments concerned with tribal development. Efforts have been made to ensure smooth and adequate flow of finances in Fifth Five Year Plan by integrating State Plan Tribal Welfare Department general sector funds, special Central assistance, funds under centrally sponsored schemes and Institutional Finance. The unique achievement since Fifth Five Year Plan has been the linkage of institutional finance with financial resources of State Exchequer, so as to have larger coverage of area and beneficiaries.

However, in practice, it was found that the objective of Tribal Sub-Plan i.e. financial integration was not achieved fully. It was, therefore, felt that the funds under Tribal Sub-Plan should be earmarked at planning stage itself and then plan with the earmarked finances besides exhibiting the funds, under separate demand of Tribal Welfare Department.

The existing flow of finances in the Project area comprises of State Plan funds, Special Central Assistance centrally sponsored scheme funds and Institutional Finances. The different financial resources are briefly narrated below:

1. Special Central Assistance:

Funds are allocated to the Project area under Special Central Assistance by the Central Government (through Ministry of Welfare) so as to supplement to State Plan effort.

2. Central and Centrally Sponsored Schemes:

Some of the Central Government sponsored schemes are also implemented like R.L.E.G.P., N.R.E.P., Construction of Girls' Hostels etc.

3. State Plan Funds:

The State Government Plan funds include funds allocated by different State Level Departments for the Sub-Plan Schemes.

4. On Going State Government Schemes:

Apart from the Plan programmes, Non-Plan Schemes are also to be maintained, for which funds are provided.

5. Finance Commission Award:

Funds are also provided under Finance Commission Award to provide infrastructure facilities including compensatory allowance and to construct residential staff quarters etc.

6. Margin Money

TRICOR provides 20% Margin Money in order to facilitate raising of loan from financing agencies like Scheduled Banks for programmes implemented on 50% subsidy, 30% Bank loan and 20% Margin Money basis.

7. Institutional Finance:

A significant source of finance in the Project area is Institutional Finance.

The quantum of Institutional Finance depends upon the loan component of the programme. But, Bank finance is yet to show itself in an appreciable manner.

Financial resources under Podu Project Area:

While planning for the development of the Podu area, the flow of finances from various sources was taken into account. A view was also taken of the financing pattern both existing and proposed on the basis of which the pattern for this project was decided.

- 1) Schemes for development of land under shifting cultivation - IFAD 80%, State Share 20%.
- 2) Schemes for improving the productivity of lands IFAD 80%, State share 20%.
- 3) Soil Conservation works - IFAD 80%, State share 20%.
- 4) Community Services - IFAD 20% (most of the schemes) State share 80%
- 5) Training Programmes - IFAD 80%, State Share 20%.
- 6) Infrastructure facilities - IFAD 80%, State Share 20%.
- 7) Marketing - IFAD 80%, State share 20%.

The financial requirements for developing 30 identified water sheds of the Podu Project area are given below:

Sl. No.	Podu Project Area	No. of water sheds	TOTAL OUTLAY (RS. IN MILLIONS)		
			IFAD	STATE SHARE	TOTAL
1.	Seethampet	4	63.52	55.13	118.65
2.	Parvathipuram	12	130.08	221.55	351.63
3.	Paderu	7	111.18	82.84	194.02
4.	Rampachodavaram	7	75.79	81.60	157.39
Total		30	380.58	441.11	821.69

The scheme-wise details of financial requirements for the Project area are furnished in the **ANNEXURE XXXII**.

A statement showing Employment generation under different schemes is furnished in Annexure **XXXIII**.

DEFINITIONS OF CERTAIN CONCEPTS AND TERMS USED IN THE REPORT.

1. **Scheduled Tribe:** All those groups or sub-groups or part thereof whose names have been listed to be Scheduled Tribes in each State or Union Territory under the provisions of Article 342 of the Constitution of India through an order of the President of India. Scheduled Tribes are afforded special rights and protection besides development under the provisions of the Constitution of India and Regulations made under its provisions.
2. **Scheduled Areas:** Those tribal areas defined by a notification of the President of India under the Fifth Schedule of the Constitution of India. This imposes a special responsibility on the State for peace and good government of Tribal Areas. The executive powers of the Union extends to giving directions to the States so as to administer such areas.
3. **Sub-Plan Areas:**

Areas of tribal concentration specially carved out comprising the following:-

 - a) All Scheduled Areas
 - b) All T. D. Block areas
 - c) All villages with sizeable tribal population and are contiguous to scheduled area or T.D. block area.
4. **Sub-Plan:** A plan within the larger State Plan specially prepared for the Integrated Development of Scheduled Tribes living in identified Sub-Plan areas containing details of funds and programmes specially drawn-up.
5. **I.T.D.A.:-** Integrated Tribal Development Agency. It is registered under the Societies Act and is established for the development of specially carved out areas of tribal concentration in each district, by translating into active concept of Sub-Plan.
6. **Podu:** 'Podu', 'Jhum', 'Begar' etc., are the local nomenclature for shifting or slash burn cultivation.
7. **Patta:** Any official document conferring ownership title on land, house or any other movable or immovable asset or achievement in education, research, etc.
8. **Watershed:** It may be defined as an area linked to the flow of water through the basin to the plains lending itself to plan for soil conservation, water harvesting and harnessing and land use during the process of which the development unit can be delienated into Micro and Mini water shed.

CROP AND PLANT TERMINOLOGY

CROPS:

English	Telugu Equivalent	Botanical Term
1. Bajra	Sajjalu	Pennisetum typhoideum
2. Jowar	Jonnalu	Sorghum vulgare
3. Maize	Mokka Jonnalu	Zeamays
4. Ragi	Ragulu	Eleusine cora cana
5. Rice	Uppudu Biyyam or Biyyam	Oryza sativa
6. Rice Bran	Tavudu	Oryza sativa
7. Small millet	Chamalu	Echinochloa frumantaca
8.	Sama	Panicum milare
9. Wheat	Godhumalu	Triticum aestivum
10. Bengal Gram	Sanagalu	Cicer arietinum
11. Black gram	Minumulu	Phaseolus mungo roxb
12. Cow pea	Bobbarlu	Vigna catjang
13. Field bean	Chikkudu	Dolichos lablab
14. Green gram	Pesalu	Phaseolus aureus roxb
15. Horse gram	Ulavalu	Dolichos biflorus
16. Peas	Batani	Pisum Sativum
17. Red gram	Kandulu	Cajanus Cajan
18. Bamboo tender shoots	Veduru Chiguru	Bambusa arundinacea
19. Drumstick tree	Mulaga Chettu	Moringa Oleifera
20. Gogu	Gongura	Hibiscus cannabinus
21. Neem Tree	Vepa Chettu	Azadirachta indica
22. Pumpkin	Gummadi	Cucurbita maxima
23. Tamarind	Chinta Chettu	Tamarindus indicus
24. Mahuva tree	Ippa Chettu	Bassia latifolia
25. Cashew tree	Jeedi Mamidi	Anacardium Occidentale
26. Niger	Valasulu	Guizotia abyssinica
27. Seetaphal	Seetaphalam	Annona squamosa
28. Soapnut tree	Kunkudu chettu	
29. Coconut tree	Kobbari chettu	Cocosmucifera
30. Mango tree	Mamidi Chettu	Mangifera indica
31. Guava	Jami Chettu	Psidium guajava
32. Sapota	Sapota	Achras sapota

ANNEXURE-I

TRIBE-WISE POPULATION IN ANDHRA PRADESH - 1981 CENSUS

Sl. No.	T r i b e	Total Sex population	% to the total S.T. population
1	2	3	4
		5,350	0.168
1.	Andh	89,567	2.820
2.	Bagata	184	0.005
3.	Bhil	28,297	0.921
4.	Chenchu	28,049	0.883
5.	Gadaba	1,67,108	5.261
6.	Gond, Naikpod, Rajgond	6,256	0.196
7.	Goud	20	0.001
8.	Hill Reddi	86,762	2.731
9.	Jatapu	36,295	1.142
10.	Kammara	173	0.005
11.	Kattunayakan	17,096	0.538
12.	Kolam, Mannervarlu	1,42,374	4.482
13.	Konda Dora	27,830	0.876
14.	Konda Kapu	54,473	1.715
15.	Konda Reddi		
16.	Kondh, Kodi, Kodhu, Desiya Kondh, Dongria Kondh, Kuttiya Kondh, Tikiria Kondh, Yenity Kondh	50,726	1.597
17.	Kotia, Benthoriya, Bartika, Dhulia, Dulia, Holva, Paiko, Putiya, Sonrona, Sidhopaiko	16,847	0.530
18.	Koya, Goud, Rajah, Racha Koya, Lingadhari Koya (ordinary), Kottu Koya, Bhino Koya, Raj Koya	3,62,341	11.408
19.	Kulia	157	0.004
20.	Malis (excluding Adilabad, Hyderabad, Karimnagar, Khammam, Mahboobnagar, Medak, Nalgonda, Nizamabad and Warangal districts)	2,017	0.063
21.	Manne Dora	21,329	0.671
22.	Mukha Dora, Nooka Dora	17,948	0.565
23.	Nayak (in the Agency tracts)	4,323	0.136
24.	Pardhan	15,573	0.490
25.	Porja, Parangi Porja	16,374	0.515

Contd.

Annex.I (Contn.)

1	2	3	4
26.	Reddi Dora	4,177	0.131
27.	Rona, Rena	122	0.003
28.	Savara, Kapu Savara, Malia Savara, Khutto Savara	81,121 11,57,604	2.554 36.448
29.	Sugali, Lambada		
30.	Thoti (in Adilabad, Hyderabad, Karimnagar, Khammam, Mahboobnagar, Medak, Nalgonda, Niza- mabad and Warangal districts)	1,753	0.055
31.	Valmiki (in the Agency tracts)	40,985 3,15,344	1.290 9.928
32.	Yanadi	3,15,618	9.937
33.	Yerukula	61,808	1.946
34.	Unclassified		
Total of all S.Ts.		31,76,001	100.00

Annexure-II

DISTRICT-WISE SCHEDULED TRIBE POPULATION, 1981 CENSUS

(In lakhs)

Sl. No.	Name of the District	S.T. Population in 1981
1.	Srikakulam	1.05
2.	Vizianagaram	1.53
3.	Visakhapatnam	3.54
4.	East Godavari	1.43
5.	West Godavari	0.67
6.	Krishna	0.67
7.	Guntur	1.40
8.	Prakasam	0.78
9.	Nellore	1.77
10.	Chittoor	0.79
11.	Cuddapah	0.38
12.	Anantapur	0.82
13.	Kurnool	0.40
14.	Mahboobnagar	1.55
15.	Ranga Reddy	0.73
16.	Hyderabad	0.14
17.	Medak	0.69
18.	Nizamabad	0.90
19.	Adilabad	2.73
20.	Karimnagar	0.60
21.	Warangal	2.93
22.	Khammam	4.30
23.	Nalgonda	1.96
	Total:	31.76

AREAS (AREA IN HECTARES).

Sl. No.	I.P.D.A. Project/ Dist.	Total Geographical area.	Forests	Barren and unclutivable land	Land put to non-agriculture us.	Permanent pastures and grazing land.	Misc. tree crops and Groves	Cultivable waste land.	Other follows.	Current follows.	Net area sown.	Area sown more than once.
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Seethampeta/ Srikakulam	30320	12167	9404	1202	10	49	485	620	2169	4099	115
2.	Parvatipuram/ Vizilangaram	224178	79008	2128	21306	36257	2552	3128	1540	10073	68186	..
3.	Paderu/ Visakhapatnam	619433	461538	..	..	21984	10931	29150	12146	12955	60729	..
4.	Rampachodavaram/ East Godavari	425460	258028	50972	18903	14840	856	17612	11351	1551	42114	9233
Total:		1299331	810741	62504	41411	83091	14328	50375	25057	26748	175128	9348
			(62.39%)	(4.81%)	(3.19%)	(6.39%)	(1.11%)	(3.88%)	(1.97%)	(2.06%)	(13.48%)	(0.72%)

PODU HOLDINGS

Annexure-IV
(Area in Hectares)

Sl. District No.	Village	No. of total families	No. of families with podu lands	Percentage	Extent of Podu Land			Podu under cultivation	Percentage	Podu under plantation	Percentage	Podu abandoned	Percentage	Average size of podu holdings
					Un Reserve	Re-serve	Total							
1. Visakhapatnam	Ballajogula	21	12	57.14	6.98	4.86	11.84	9.82	82.90	1.21	10.26	0.81	6.84	0.99
2. Visakhapatnam	Chuttamitta	21	16	76.19	20.75	..	20.75	6.19	29.85	12.35	59.50	2.21	10.65	1.30
3. Visakhapatnam	Kommaranchala	26	20	76.92	6.50	10.32	16.82	14.80	87.97	2.02	12.03	..	..	0.84
4. Visakhapatnam	Gudam Liputta	43	35	81.40	53.56	..	53.56	17.74	35.11	21.89	45.35	11.54	21.54	1.53
5. Srikakulam	Seethi	71	68	95.78	79.04	34.12	113.16	50.19	44.36	40.49	35.78	22.47	19.86	1.66
6. Srikakulam	Althi	23	18	78.26	16.72	..	16.72	7.00	41.89	5.67	33.90	4.05	24.21	0.93
7. Vizianagaram	Gopalapuram	15	13	86.67	31.58	..	31.58	15.18	48.08	3.85	12.18	12.55	39.74	2.43
8. Vizianagaram	Londamuru	24	24	100.00	44.34	..	44.34	22.07	49.77	..	..	22.27	50.23	1.85
9. Vizianagaram	Toampalapadu	27	23	85.18	37.85	..	37.85	14.78	39.03	3.23	8.56	19.84	52.41	1.94
10. East Godavari	Boddagandi	31	31	100.00	25.10	..	25.10	25.10	100.00	25.10	..	..	..	0.81
11. East Godavari	Chekkuvada	73	70	95.89	70.85	..	70.85	44.94	63.43	36.57	36.57	..	..	1.01
12. East Godavari	Kaniwada	104	104	100.00	98.93	..	98.93	66.04	67.56	..	..	32.08	32.44	0.95
		479	434	90.60	492.20	49.30	541.50	294.65	54.42	119.03	21.98	127.82	23.60	1.25

LAND HOLDINGS

Annexure - V

(Area in Hectares)

Sl. No.	District	Village	TOTAL families	No. of families with land	No. of land less families	% of land less families	PERCENT OF LAND OWNED						TOTAL LAND			Per family land holding (Wet + Dry + podu)	
							DRY		WET		PODU		Patta	W.Patta	Total		
							Patta	W.Patta	Patta	W.Patta	Patta	W.Patta					
1.	Visakhapatnam	Ballyagada	21	19	2	9.5	..	7.29	6.073	..	6.983	4.858	13.06	12.15	25.202	1.32	
2.	Visakhapatnam	Chattumitta	21	16	5	23.8	..	..	..	..	18.242	2.510	18.24	2.43	20.753	1.30
3.	Visakhapatnam	Kommaranicolala	26	25	1	3.8	22.06	21.46	..	..	6.502	10.323	28.53	31.78	60.308	2.41
4.	Visakhapatnam	Gudmaliputu	43	39	4	9.2	92.21	..	17.712	..	..	53.562	109.93	53.56	163.490	4.19
5.	Srikakulam	Seedhi	71	68	3	4.2	54.85	..	9.989	..	79.042	34.109	143.82	34.11	177.927	2.62	
6.	Srikakulam	Althi	23	21	2	8.7	3.91	..	6.093	..	16.720	16.720	10.00	16.72	26.721	1.29	
7.	Vizianagaram	Gopulapuram	15	13	2	13.3	8.95	0.40	2.429	..	3.846	27.732	15.20	28.14	43.360	3.34	
8.	Vizianagaram	Kondamuru	24	24	..	..	..	33.20	..	0.809	..	44.332	..	78.34	78.340	3.26
9.	Vizianagaram	Pampalpadu	27	25	2	7.4	8.62	6.39	..	12.754	..	37.854	8.64	57.00	65.636	2.62	
10.	East Godavari	Boddagandi	31	31	..	..	19.63	4.05	..	..	1.822	23.279	21.46	27.33	48.785	1.57
11.	East Godavari	Chekkavada	73	73	..	..	41.48	39.07	..	..	..	70.850	41.48	109.95	151.397	2.07
12.	East Godavari	Koniwada	104	104	..	..	23.40	..	6.518	..	..	98.927	29.93	98.97	128.858	1.24
Total:			479	458	21	4.4	275.11	111.86	48.744	13.563	116.437	425.06	440.29	550.48	990.777	2.16	
							386.97 (Total)		62.307 (Total)		541.50 (Total)						

W.Patta = Without Patta

PRESSURE ON PUDU CLEARANCE

ANNEXURE VI

Sl. No.	District	Village	No. of families engaged on Podu	Extent of Podu (acres)	Podu Cleared by Fore fathers		Podu cleared by present generation.	
					No. of families	Extent (hectares)	No. of families	Extent (hectares)
1	2	3	4	..	5	6	7	8
1.	Visakhapatnam	Ballyguda	12	11.84	10	10.020	2	1.823
2.	Visakhapatnam	Chuttumitta	16	20.75	..	..	16	20.753
3.	Vizianagara	Visakhapatnam Kommaranchala	20	16.82	12	10.550	8	6.275
4.	Visakhapatnam	Gudamaliputtu	35	53.56	6	11.944	29	41.619
5.	Sirkakulam	Soedhi	68	113.16	68	113.149	..	..
6.	Srikakulam	Althi	18	16.72	18	16.720	..	..
7.	Vizianagaram	Gopalapuram	13	31.58	13	31.579	..	..
8.	Vizianagaram	Kondanusuru	24	44.34	24	44.334	..	..
9.	Vizianagaram	Tompalapadu	23	37.85	23	37.854	..	..
10.	East Godavari	Boddagandi	31	25.10	15	14.575	16	10.526
11.	East Godavari	Kanivada	104	98.93	67	59.696	37	39.231
12.	East Godavari	Chekkavada	70	70.85	68	68.016	2	2.834
Total			434	541.50 (74.85%)	324 (74.65%)	418.437 (77.27%)	110 (25.35%)	123.060 (22.73%)

DETAILS OF BASIC FACILITIES AVAILABLE IN AND AROUND THE APPRA VILLAGES MENTIONED IN ANNEXURE-VII

ANNEXURE-VII

Sl. District/ No. I.T.O.	Name of the village	Location of the village	distance from Bus stop	distance from Rai- lway stat- ion	distance from Neada Head quarters	type of road	Electri- city	Housing	drinking water	post office	Bank	hospital	veterinary hospital	pharmacy shop	snacks, bar	Palandi	Elementary school	Asst. school	High school	college	Hostel
1. Visakhapatnam/ Paderna	Ballyaguda	Hillock	5.0	10	18	Katcha	no	no	Hill stream	5	1	10	10	1.5	10	1.5	1.5	5	10	10	10
2. -do-	Chuttanitta	-do-	0.5	69	0.5	-do-	no	yes	Bore well	0.5	0.5	0.5	0.5	0.5	0.5	yes	0.5	0.5	0.5	23	0.5
3. -do-	Kommaranohala	foot hill	2.0	116	15	foot path	yes	no	hill stream	2	15	3	3	2	2	yes	1	3	15	15	15
4. -do-	Kudmaliputtu	-do-	3.0	88	12	-do-	no	no	-do-	1.5	12	12	1.5	1.5	12	yes	1.5	1.5	12	50	12
5. Srikakulam/ Sectampeta	Seedli	Hillock	6.0	48	15	Katcha	yes	no	Bore well	6	15	8	15	2	15	2	yes	2	15	28	8
6. -do-	Althi	-do-	6.0	8	55	-do-	no	yes	well	7	15	15	15	1	8	15	yes	1.0	13	15	7
7. Vizianagaram/ Parvatipuram	Gop. Rajapuram	Foot hill	2.0	40	6	-do-	yes	no	bore well	1	6	6	3	1	6	1	yes	6	6	20	1
8. -do-	Kandamuru	Hillock	31.0	31	31	foot/ path	no	no	hill stream	8	31	31	31	10	20	4	yes	12	21	31	12
9. -do-	Komp. Rajapuram	foothill	13.0	56	34	-do-	no	no	well	9	20	20	19	yes	19.1	yes	yes	20	20	24	20
10. East Godavari/ Ramp. Godavaram	Boddagaddi	hillock	10.0	191	2.1	-do-	no	no	hill stream	18	25	18	18	18	18	yes	yes	18	18	150	18
11. -do-	Kanivada	hill slope	55.0	135	40	-do-	no	yes	-do-	6	55	40	55	20	20	yes	yes	20	55	80	20
12. -do-	Chakkavada	foot hill	35.0	115	35	-do-	no	yes	-do-	5	35	35	35	15	35	yes	yes	15	35	60	35

ECONOMIC STATUS

Sl. No.	Name of the District	Name of the Village	Total population	Earners	Non-earners	% of earners	Percentage of non-earners
1	2	3	4	5	6	7	8
1.	Visakhapatnam	Ballyaguda	92	63	29	68.48	31.52
2.	Visakhapatnam	Chuttumitta	90	42	48	46.67	53.33
3.	Visakhapatnam	Kommarchula	119	70	49	58.82	41.18
4.	Visakhapatnam	Gudamali-puttu	191	127	64	66.49	33.51
5.	Srikakulam	Seedhi	331	221	110	66.76	33.24
6.	Srikakulam	Althi	71	49	22	69.01	30.99
7.	Vizianagaram	Gopalapuram	72	45	27	62.50	37.50
8.	Vizianagaram	Kondamusuru	108	52	56	48.14	51.86
9.	Vizianagaram	Tompalapadu	122	73	49	59.83	40.17
10.	E. Godavari	Boddagandi	147	73	74	49.66	50.34
11.	E. Godavari	Chekkavada	338	182	156	53.85	46.15
12.	E. Godavari	Kaniwada	444	263	181	59.29	40.71
Total:			2125	1260	865	59.29	40.71

S.No.	District	Village	Total No. of Families	AGRICULTURE										
				No. of families with paddy cultivation only	Percentage	No. of families with paddy and settled cultivation	Percentage	No. of families with settled cultivation only	Percentage	No. of families depending on Agril. labour only	Percentage	No. of families depending on non-agril. labour only	Percentage	Others (employees)
1.	Visakhapatnam	Ballyyaguda	21	2	9.5	10	47.6	7	33.4	2	9.5	..	..	..
2.	Visakhapatnam	Chaitanitta	21	16	76.2	..	..	..	..	4	19.1	1(Mason)	4.7	..
3.	Visakhapatnam	Kamachanola	26	5	19.2	15	57.7	5	19.3	1	3.8	..	..	..
4.	Visakhapatnam	Gudmaliputtu	43	9	20.9	26	60.5	4	9.3	4	9.3	..	..	..
5.	Srikakulam	Seedhi	71	16	22.5	52	73.3	..	..	3	4.2	..	..	..
6.	Srikakulam	Althi	23	6	26.1	12	52.2	3	13.0	2	8.7	..	..	..
7.	Vizianagaram	Gopalapuram	15	1	6.7	12	80.0	..	..	2	13.3	..	..	..
8.	Vizianagaram	Kondamuru	24	..	..	24	100.0	..	..	..	..	..	..	..
9.	Vizianagaram	Tempalipadu	27	6	22.3	17	62.9	2	7.4	..	..	..	..	2
10.	East Godavari	Boddagandi	31	1	3.2	30	96.8	..	..	..	..	..	..	..
11.	East Godavari	Chekkavada	73	8	10.9	62	84.9	3	4.1	..	..	..	..	..
12.	East Godavari	Kanivada	104	72	69.2	32	30.8	..	..	..	..	..	..	..
Totals			479	142	29.7	292	60.9	24	5.1	18	3.7	1	0.2	2

SIZE GROUP OF PODU HOLDINGS

Sl. No.	District	Village	No. of families with Podu lands	Size of the Podu holdings (acres/Hectares)						Total families with Podu lands
				Below 1 (0.405)	1.1 - 2.00 (0.046-0.81)	2.1 - 3.00 (0.82-1.21)	3.1 - 4.00 (1.22-1.61)	4.1-5.00 (1.620-2.024)	Above 5 (2.024)	
1	2	3	4	5	6	7	8	9	10	11
1.	Visakhapatnam	Ballyaguda	12	4	3	2	..	3	..	12
2.	Visakhapatnam	Chuttumitta	16	5	..	4	..	5	2	16
3.	Visakhapatnam	Kommaronchula	20	7	7	4	1	1	..	20
4.	Visakhapatnam	Gudamaliputtu	35	1	8	7	8	5	6	35
5.	Srikakulam	Saedhi	68	..	5	11	14	15	22	68
6.	Srikakulam	Althi	18	..	6	4	6	..	2	18
7.	Vizianagaram	Gopalapuram	13	..	..	..	2	6	5	13
8.	Vizianagaram	Kondamusuru	24	..	2	6	7	4	5	24
9.	Vizianagaram	Ponpalapadu	23	..	2	4	8	5	4	23
10.	East Godavari	Boddagandi	31	10	16	2	..	2	1	31
11.	East Godavari	Kaniwada	104	44	54	6	..	..	..	104
12.	East Godavari	Chelkavada	70	42	22	6	..	..	..	70
Total:			434	113 (26.03%)	125 (28.80%)	57 (13.13%)	46 (10.59%)	46 (10.59%)	47 (10.82%)	434 (100%)

ANNUAL RETURNS AND NET INCOME IN WET LAND CULTIVATION

Sl. No.	District:	Village:	Extent of wet land under cultivation (Hectares)	Total output value (Rs. in Millions)	Per hectare output value (in Rs.)	Cost of cultivation per Hectare (in Rs.)	Net income per hectare (in Rupees)
1	2	3	4	5	6	7	8
1.	Visakhapatnam	Ballyaguda	6.073	0.0180	2960	864.50	2099.50
2.	Visakhapatnam	Chuttumitta	..	..	..	..	..
3.	Visakhapatnam	Kommaranchula	..	..	..	..	..
4.	Visakhapatnam	Gudamaliputtu	17.712	0.0452	2560	592.80	2210.70
5.	Srikakulam	Seedhi	9.319	0.0343	3460	834.50	2593.50
6.	Srikakulam	Althi	6.093	0.0185	3040	666.30	2371.20
7.	Vizianagaram	Gopalapuram	2.429	0.0053	2460	432.30	2028.40
8.	Vizianagaram	Kondamusuru	0.809	0.0021	2620	534.50	2074.80
9.	Vizianagaram	Tompalapadu	12.754	0.0347	2720	469.30	2247.70
10.	East Godavari	Boddagandi	..	..	..	531.00	1932.00
11.	East Godavari	Kanivada	6.518	0.0162	2470	..	2078
12.	East Godavari	Chekkavada	..	..	..	..	..
Total			62.307	0.1749	2807.60	620.60	2187.00

ANNUAL RETURNS AND NET INCOME IN DRY LAND CULTIVATION

ANNEXURE -XII

Sl. No.	District	Village	Extent of dry land under cultivation (Hectares)	Total output value (Rs. in Millions)	Per hectare output value (Rs.)	Cost of cultivation per hectare (Rs.)	Net income per Hectare (Rs.)
1.	Visakhapatnam	Ballyaguda	--	--	--	--	--
2.	Visakhapatnam	Chuttumitta	--	--	2531.75	679.25	1852.50
3.	Visakhapatnam	Kommaronchula	43.52	0.1100	2419.61	568.10	1851.51
4.	Visakhapatnam	Gudamaliputtu	92.21	0.2234	2247.70	444.60	1803.10
5.	Srikakulam	Seedhi	54.85	0.1233	2226.95	419.90	1807.05
6.	Srikakulam	Althi	3.91	0.0067	2074.80	345.80	1729.00
7.	Vizianagaram	Gopalapuram	9.35	0.0194	1561.04	296.40	1264.64
8.	Vizianagaram	Kondamusuru	33.20	0.0518	2348.97	531.05	1817.92
9.	Vizianagaram	Tompalapadu	15.01	0.0353	1882.14	345.80	1536.34
10.	East Godavari	Boddagandi	23.68	0.0445	1703.48	329.74	1359.73
11.	East Godavari	Kanivada	23.42	0.0396	1725.05	321.10	1403.95
12.	East Godavari	Chekkavada	80.55	0.1389			
Total:			379.70	0.7949	2093.82	423.30	1665.77

ANNUAL RETURNS OF NET INCOME IN PODU CULTIVATION

Sl.No.	District	Village	Extent of Podu land under cultivation (Hectares)	Total out put value in Millions	Per hectare out put value in Rs.	Cost of cultivation per hectare (Rs)	Net income per Hectare (Rs)
1.	Visakhapatnam	Ballyaguda	9.82	0.0184	1877.20	666.90	1210.30
2.	Visakhapatnam	Chuttumitta	6.19	0.0091	1470.64	412.50	1057.14
3.	Visakhapatnam	Koramaranchula	14.80	0.0188	1346.15	370.50	975.65
4.	Visakhapatnam	Gudamaliputhi	17.74	0.0316	1783.34	494.00	1289.34
5.	Srikakulam	Seedhi	50.19	0.0889	1771.00	531.00	1240.00
6.	Srikakulam	Althi	7.00	0.0114	1630.80	419.90	1210.30
7.	Vizianagaram	Gopalaparam	15.13	0.0254	1674.66	518.70	1155.96
8.	Vizianagaram	Kondamusturu	22.07	0.0439	1988.35	738.50	1249.85
9.	Vizianagaram	Tompalapodu	14.38	0.0291	1615.38	439.66	1175.72
10.	East Godavari	Boddagandi	25.10	0.0350	1393.08	395.20	997.88
11.	East Godavari	Kanivada	66.84	0.1040	1556.10	438.42	1117.68
12.	East Godavari	Checkkavada	44.94	0.0722	1578.33	395.20	1183.13
			294.652	0.4878	1655.64	484.98	1170.66

ANNUAL INCOME OF FAMILIES-AVERAGE ANNUAL INCOME PER FAMILY

(Rs. in Millions)

Sl. No.	District	Village	No. of total families	Agriculture	Agricultural labour	Non.Agl. labour	M.F.P.	Forest labour	Live stock	Employment	Others	Total	Average Annual income per family (in Rs.)
1.	Visakhapatnam	Ballyaguda	21	0.036	0.021	--	0.001	--	0.002	--	0.010	0.021	3875
2.	Visakhapatnam	Chattumitta	21	0.009	0.018	0.031	0.001	--	0.019	--	0.015	0.094	4466
3.	Visakhapatnam	Kommaranchula	26	0.106	0.012	0.002	--	0.005	0.001	--	0.003	0.130	4999
4.	Visakhapatnam	Gudamaliputtu	43	0.232	0.006	--	0.006	--	0.001	--	--	0.244	5680
5.	Srikakulam	Seedhi	71	0.246	0.033	--	0.006	--	0.003	--	0.019	0.309	4347
6.	Srikakulam	Althi	23	0.039	0.022	--	0.010	--	--	--	0.002	0.072	3151
7.	Vizianagaram	Gopalapuram	15	0.051	0.009	--	0.003	--	0.001	--	0.007	0.071	4699
8.	Vizianagaram	Kondamusuru	24	0.085	0.009	0.001	0.009	0.004	0.002	--	--	0.110	4596
9.	Vizianagaram	Tompalpadu	27	0.077	0.013	--	0.002	--	0.004	0.024	--	0.118	4384
10.	East Godavari	Boddagandi	31	0.080	0.011	--	0.002	--	0.006	--	0.009	0.106	3427
11.	East Godavari	Kanivada	104	0.296	0.013	--	0.027	--	0.025	0.005	0.003	0.369	3544
12.	East Godavari	Chekkavada	73	0.211	0.009	--	0.009	0.011	--	--	--	0.240	3226
Total:			479	1.468	0.126	0.034	0.076	0.020	0.064	0.029	0.068	1.944	4059

AVERAGE ANNUAL EXPENDITURE OF FAMILIES

Annexure - XV
(Rs. in Millions)

Sl. No.	District	Village	No. of total families	Food	Clothes	Edu- cation	Festival & Cele- brations	House hold equip- ments	Fuel & light- ing	Trave- lling	House repair	Liquor	Others	Invest- ment on agri.	Total	average expenditure per family (in Rs.)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1.	Visakhapatnam	Ballyaguda	21	0.059	0.008	..	0.005	..	0.003	..	0.0025	0.0042	..	0.012	0.094	4497	
2.	Visakhapatnam	Chuttumitta	21	0.070	0.013	..	0.014	0.004	0.003	..	..	0.0042	0.0042	0.0025	0.115	5476
3.	Visakhapatnam	Konnamronimula	26	0.080	0.012	..	0.007	0.003	0.003	..	..	0.0150	0.0070	0.013	0.143	5494
4.	Visakhapatnam	Gudamaliputta	43	0.120	0.018	..	0.021	0.012	0.006	..	..	0.0378	0.0107	0.062	0.287	6600
5.	Srikakulam	Seedhi	71	0.160	0.022	..	0.017	0.010	0.009	0.0067	0.0030	0.0388	0.0028	0.0143	0.314	4419	
6.	Srikakulam	Althi	23	0.050	0.007	..	0.006	0.001	0.002	0.0005	..	0.0063	0.0050	0.009	0.088	3815	
7.	Vizianagaram	Gopalepuram	15	0.045	0.003	..	0.002	0.001	0.004	..	0.0030	0.0076	..	0.008	0.073	4886	
8.	Vizianagaram	Kondamuru	24	0.062	0.010	..	0.014	0.002	0.004	0.0009	0.0048	0.0183	0.0084	0.018	0.142	5929	
9.	Vizianagaram	Tampalpedu	27	0.073	0.022	0.001	0.011	0.003	0.003	0.0006	0.0126	0.0052	0.0039	0.012	0.148	5463	
10.	East Godavari	Loddigandi	31	0.070	0.005	..	0.005	0.002	0.004	0.0004	0.0032	0.0063	0.0031	0.009	0.108	3474	
11.	East Godavari	Kanjavada	104	0.193	0.010	..	0.016	0.028	0.009	0.0028	0.0064	0.0183	..	0.029	0.318	3059	
12.	East Godavari	Chizkavada	73	0.136	0.018	..	0.011	0.003	0.009	0.0017	0.0105	0.0350	..	0.010	0.243	3524	
Total:				479	1.123	0.148	0.061	0.129	0.069	0.059	0.0136	0.0430	0.1972	0.0574	0.230	2.073	4327.15

S.No.	District	Village	Fam- lies	ted fam- lies.	No. of fam- lies	Amount taken	Interest	Amount repaid	No. of fam- lies	Amount taken	Interest	Amount repaid	No. of fam- lies	Amount taken	Interest	Amount repaid
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Visakhapatnam	Ballyaguda	21	5	1	4000	11%	1600	--	--	--	--	--	4300	--	--
2.	Visakhapatnam	Chuttumitta	21	17	4	2800	11%	--	13	--	2150	--	100	--	--	--
3.	Visakhapatnam	Nonmaronchula	26	8	1	800	11%	600	6	5600	(cloth)	50%	800	1	60	--
4.	Visakhapatnam	Gudamliputtu	43	23	17	43800	11%	19100	--	--	--	--	6	7500	--	--
5.	Srikakulam	Seedhi	71	6	6	6300	11%	--	--	--	--	--	--	--	--	--
6.	Srikakulam	Althi	23	5	5	10000	11%	--	--	--	--	--	--	--	--	--
7.	Vizianagaram	Gopalapuram	15	8	4	840	11%	--	3	900	420	--	1	600	--	600
8.	Vizianagaram	Kondamusuru	24	16	--	--	--	--	11	16600	--	25%	--	--	--	--
9.	Vizianagaram	Pompalapadu	27	15	--	--	--	--	15	5000	--	24%	--	--	--	--
10.	East Godavari	Boddagandi	31	--	--	--	--	--	--	--	--	--	--	--	--	--
11.	East Godavari	Checkkavada	73	--	--	--	--	--	--	--	--	--	--	--	--	--
12.	East Godavari	Kaniwada	104	--	--	--	--	--	--	--	--	--	--	--	--	--
			479	103	33	68540	11%	21300	48	28100	2570	50%	900	12	12460	--
				(21.50%)	(36.89%)	(60.13)		(31.07)	(49.48)	(26.91)		25%	(2.93%)	(12.37%)	(10.93%)	--
												24%				600
																(4.82%)

Contd.

Corporation				Total amount indebted	Average debt per family
No. of fami- lies	Amount taken	Interest	Amount repaid		
18	19	20	21	22	23
--	--	--	--	8300	1660
--	--	--	--	4950	354
--	--	--	--	6460	808
--	--	--	--	51300	2565
--	--	--	--	6300	1050
--	--	--	--	10000	2000
--	--	--	--	2760	345
5	2360	11%	100	18900	1182
--	--	--	--	5000	334
--	--	--	--	--	--
--	--	--	--	--	--
--	--	--	--	--	--
5	2360	11%	100	113970	1107

Sl. No.	District	Village	Total No. of families.	Total Assets value (Rs. in Millions)					Agrif. equipment.	Total	Average Asset value (in Rupees)
				Land	House Site cattle or goats.	Live stock	House hold equipment (including gold)				
1	2	3	4	5	6.	7	8	9	10	11	
1.	Visakhapatnam	Ballyagada	21	0.211	0.031	0.031	0.051	0.003	0.328	15606	
2.	Visakhapatnam	Chuttumitta	21	0.103	0.094	0.086	0.038	0.006	0.326	15541	
3.	Visakhapatnam	Kommaranchula	26	0.362	0.052	0.056	0.048	0.005	0.524	20138	
4.	Visakhapatnam	Gudamaliputtu	43	1.293	0.108	0.067	0.103	0.006	1.576	36635	
5.	Srikakulam	Seechi	71	1.023	0.142	0.036	0.050	0.016	1.327	18687	
6.	Srikakulam	Althi	23	0.329	0.092	0.013	0.015	0.004	0.458	19910	
7.	Vizianagaram	Gopalapuram	15	0.154	0.023	0.017	0.007	0.003	0.204	13610	
8.	Vizianagaram	Kodamusuru	24	0.452	0.024	0.085	0.014	0.008	0.583	31207	
9.	Vizianagaram	X Topalapadu	27	0.493	0.054	0.046	0.062	0.009	0.664	24613	
10.	East Godavari	Boddagandi	31	0.239	0.047	0.091	0.016	0.006	0.398	12850	
11.	East Godavari	Kanivada	104	0.576	0.351	0.100	0.065	0.030	1.213	11661	
12.	East Godavari	Chelkavada	73	0.760	0.584	0.124	0.020	0.015	1.504	20599	
Total:			479	5.995	1.602	0.908	0.489	0.111	9.105	19009	

A N N E X U R E - XVIII

INTEGRATED TRIBAL DEVELOPMENT AGENCY-WISE DETAILS OF SHIFTING CULTIVATORS

Sl.No.	Name of the ITDA	Total No. of families	Total Extent under cultivation in the villages Excluding Pedu			No. of families engaged in pedu outside Reserve Forest	Total extent under active shifting cultivation				Total extent of land under cultivation of shifting cultivators in the villages		
			Dry	Wet	Total		Tribals	Hill top	Slops	Foot hills	Total	Dry	Wet	Total
1.	Seethampeta	9051	1100	2534	3634	9051	-	4901	381	5282	741	1844	2585
2.	Parvathipuram	11920	8838	1420	10258	8696		7396	-	7396	5559	771	6330
3.	Paderu	47117	38615	18683	57296	25383	6632	7080	7817	21529	21159	370	21529
4.	Rampachodavaram	9714	7242	636	7878	6871	769	6140	343	7252	5955	149	6104
Total:		77802	55795	23273	79066	50001	7401	25517	8541	41459	33414	3134	36548

<i>SZ. No.</i>	<i>I. T. D. A. No.</i>	<i>Total no. of families in the village</i>	<i>No. of families engaged in pedu</i>	<i>percentage of pedu cultivators</i>	<i>Total extent of land including pedu land</i>	<i>of pedu land</i>	<i>Land to total land</i>
1	2	3	4	5	6	7	8
<u>Seethampeta</u>							
1.	Pettikavalasa	4254	4254	100	4864	2648	54.4
2.	Kusimigadda	2101	2101	100	1421	1299	91.4
3.	Pollagadda	1779	1779	100	1066	894	83.9
4.	Gajjiligadda	917	917	100	516	441	85.5
Sub-total		9051	9051	100	7867	5282	67.1
<u>Parvathipuram</u>							
1.	Gummidigadda	1496	1103	73.7	1421	965	67.9
2.	Peddagadda	1559	1208	77.5	1655	953	57.6
3.	Peddagadda-I	1255	1049	83.6	1249	824	66
4.	Johapuram	1157	979	84.6	2426	820	33.8
5.	Nagavali	985	777	78.9	1060	784	74
6.	Gomukhi	709	504	71.1	864	485	56.1
7.	Vogavathi	1197	538	45	893	485	54.3
8.	Puliputti	871	696	79.9	815	474	58.1
9.	Vettigadda	604	462	76.5	991	463	46.7
10.	Suvarna Mukhi	592	483	81.6	719	437	60.8
11.	Peddagadda-II	588	433	73.6	799	435	54.4
2.	Podasekha, K. Gadda	907	464	51.2	834	271	32.5
Sub-total		11920	8696	72.9	13726	7396	53.9
<u>Padoru</u>							
1.	Sileru	34435	21481	62.3	33944	16972	50
2.	Sarada	4537	1839	40.5	3744	1872	50
3.	Gosthani	2556	817	32	2970	1485	50
4.	Yelaru	1964	509	25.9	938	469	50
5.	Thandava	2310	482	20.9	882	441	50
6.	Champavati	776	117	15.0	304	152	50
7.	Varaha	539	138	25.6	276	138	50
Sub-Total		47117	25383	53.9	43058	21529	50
<u>Rampachodavaram</u>							
1.	Seethampalli	3718	2494	67.1	4815	2598	53.9
2.	Pamileru	2377	1858	78.2	3738	1931	51.6
3.	Seleru	1446	956	66.1	1930	1172	60.7
4.	Godavari	1226	846	69	1615	882	54.6
5.	Pampa	442	390	88.2	686	364	53.1
6.	Yettikalva	206	177	86	324	165	50.9
7.	Vanahangi	299	150	50.2	248	140	56.4

Sl. No.	I-T-D-A Water Shed	No. of Podu villages	No. of Podu families	Extent under Podu (Hectares)			Total
				Hill top	Hill slope	Foot hills	
<u>SEMPALPETA</u>							
1.	Pottika valasa	28	4254	--	2447	201	2648
2.	Kusindigadda	19	3101	--	1228	71	1299
3.	Pollagadda	20	1779	--	822	72	894
4.	Gajjiligadda	13 (80)	917 (9051)	--	404(4901)	37 (331)	441 (5282)
<u>PARVATHIPURAM</u>							
1.	Gummidigadda	40	1103	--	965	--	965
2.	Pedagadda	20	1208	--	953	--	953
3.	Pedagadda - 1	34	1049	--	824	--	824
4.	Ichapuram	22	979	--	820	--	820
5.	Nagavali	24	777	--	784	--	784
6.	Gomukhi	22	504	--	485	--	485
7.	Vegavathi	13	538	--	485	--	485
8.	Puliputti	22	696	--	474	--	474
9.	Vettigadda	15	462	--	463	--	463
10.	Suvarna Mukhi	11	483	--	437	--	437
11.	Pedagadda-II	18	433	--	435	--	435
12.	Peda sekha Kondagadda	25(266)	464(3696)	--	271(7396)	--	271(7396)
<u>PADERU</u>							
1.	Sileru	1380	21481	5654	5434	5884	16972
2.	Sarada	220	1839	156	923	793	1872
3.	Gosthani	128	817	640	437	408	1485
4.	Thandava	36	482	56	48	337	441
5.	Yeleru	26	509	107	84	278	469
6.	Champavathi	16	117	--	152	--	152
7.	Varaha	10 (1816)	138 (25383)	19 (6632)	2 (7080)	117 (7817)	138 (21529)
<u>RAMPACHODAVARAM</u>							
1.	Seetrapalli	58	2494	243	2236	119	2598
2.	Pamuleru	58	1858	175	1681	75	1931
3.	Sileru	40	956	198	872	102	1172
4.	Godaveri	25	846	77	739	6	832
5.	Pampa	11	330	42	239	23	364
6.	Yetikolwa	5	177	28	124	13	165
7.	Vanchangi	7 (204)	150 (6871)	6 (769)	129 (6140)	5 (243)	140 (7252)
Grand Total:		2366	50001	7401	25517	8511	41459
				17.85%	61.56%	20.60%	

UPDATING OF LAND RECORDS

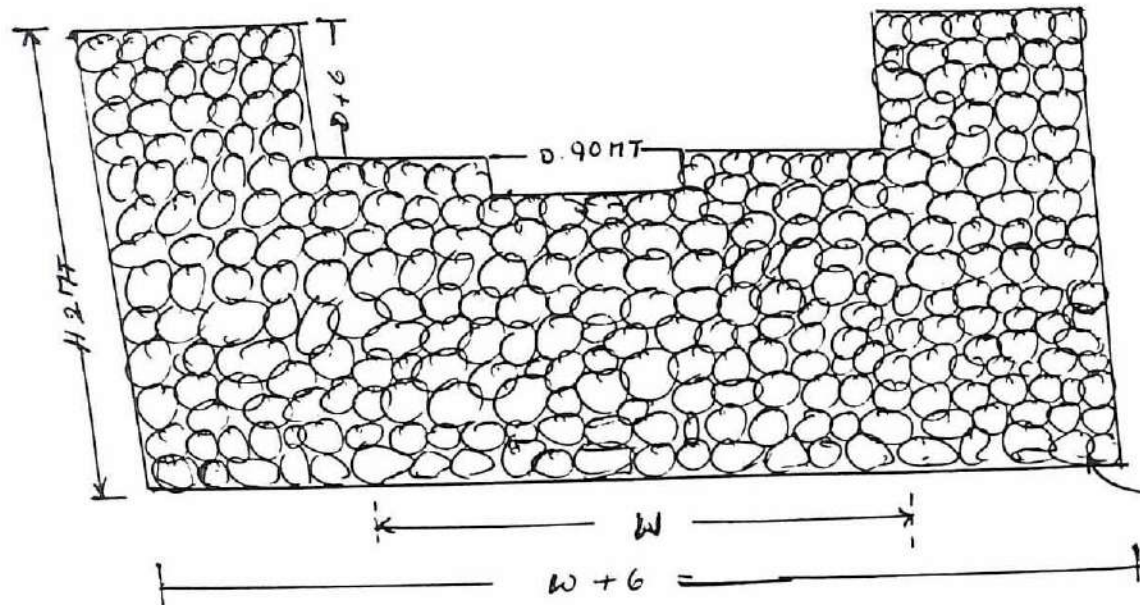
(Rs. in Millions)

S.No.	I.T.D.A.	TOTAL AMOUNT REQUIRED		Total
		I.F.A.D. (80%)	(State 20%)	
1.	Seethampet	0.02	0.08	0.10
2.	Parvathipuram	-	-	-
3.	Paderu	-	-	-
4.	Rampachodavaram	0.91	3.67	4.58
GRAND TOTAL		0.93	3.75	4.68

Expenditure (Rs. in Millions)

	<u>Recurring</u>	<u>Non-Recurring</u>	<u>Total</u>
1. Salaries of staff	2.50	Jeep 0.13	2.63
2. T.A. and D.A.	1.00	Typewriter & Photo 0.20	1.20
3. Contingent Expenditure	0.30	copying machine	0.30
4. Measurement Equipment	0.30		0.30
5. Cost of survey boundary marks	0.15		0.15
Total :	4.25	0.33	4.58

PLAN OF TYPICAL GULLY CONTROL STRUCTURE



ESTIMATED VALUE Rs 1500/-

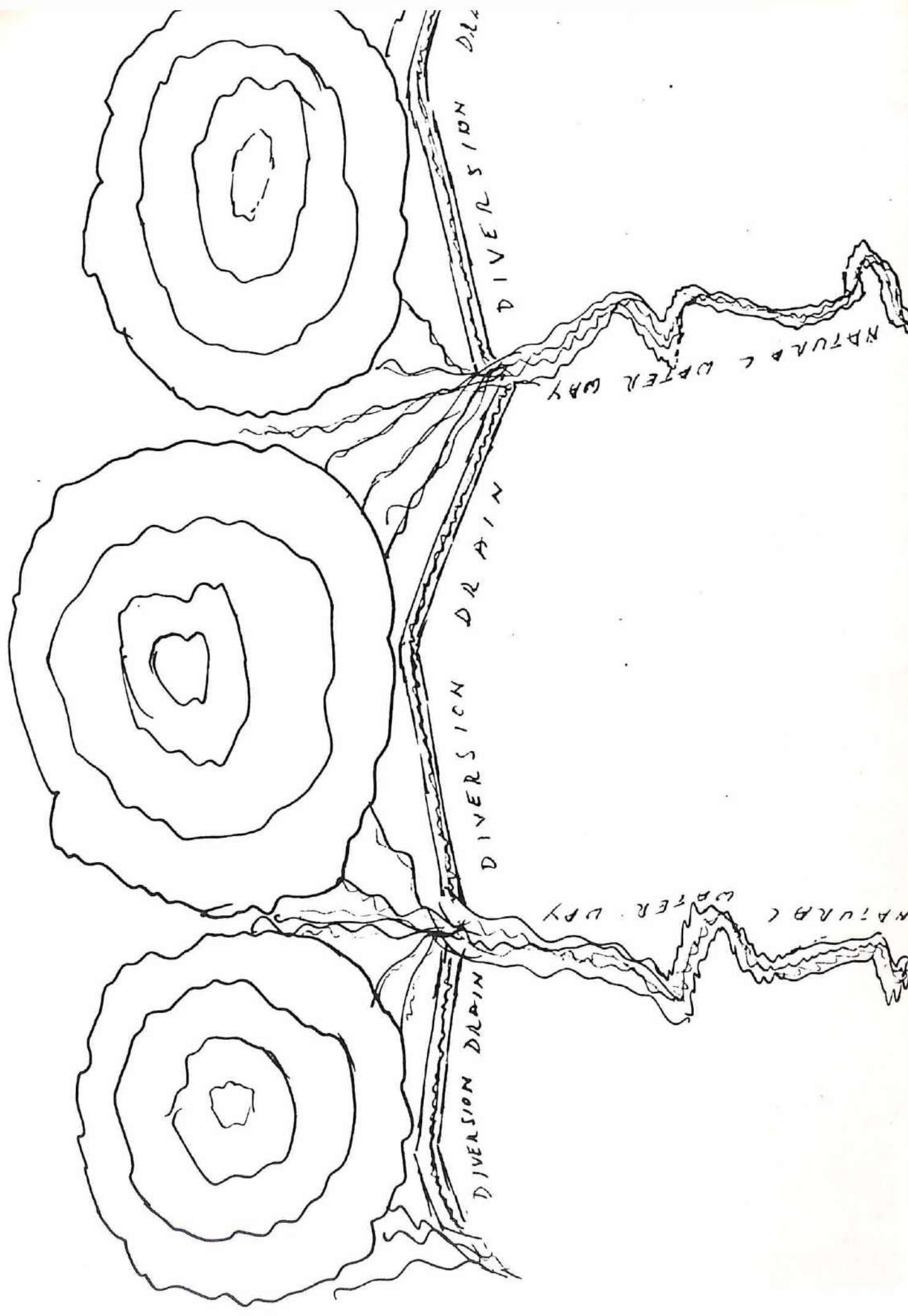
HEIGHT OF THE STRUCTURE 2 MT.

LENGTH OF THE STRUCTURE =

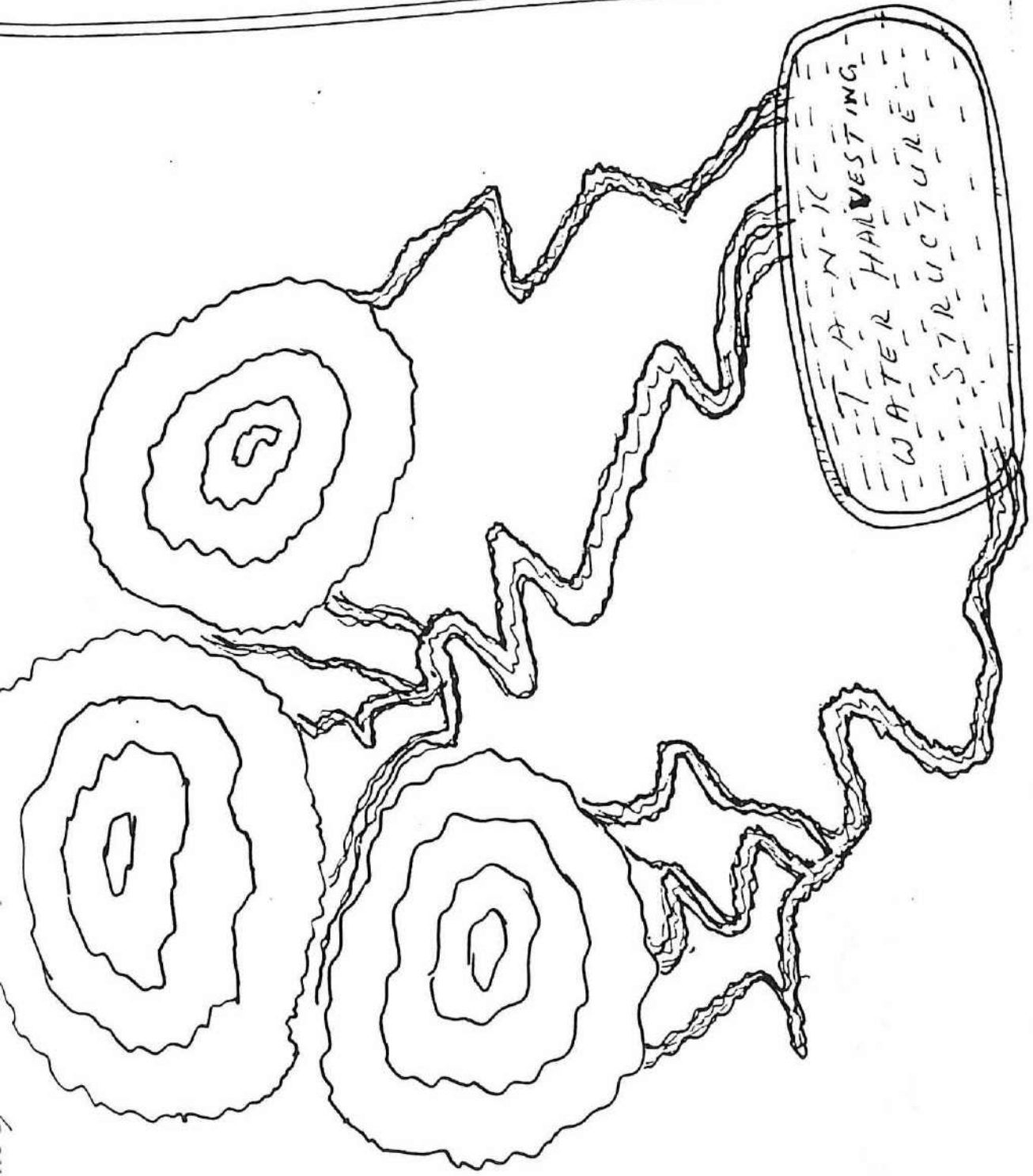
= WIDTH OF THE
STRUCTURE

FIELD PICKED
STONES.

ANNEXURE XX-B



WATER HARVESTING
STRUCTURE
(model)



SOIL CONSERVATION MEASURES

(Rs. in Millions)

Sl. No.	I.T.D.A.	Area proposed for treatment measures.	Nature of works	Unit Cost	TOTAL AMOUNT R. VI.F.F.D		
					I.F.A.D.	State Share Total	
1	2	2	4	5	6	7	
1.	SEETHAMPETA	5282	1. Graded Bunding 2. Stone Terracing 3. Bench Terracing 4. Galley construction	0.0015 " " "	6.34	1.50	
2.	PARYAATHIPURAM	15171	1. Vattivara Planting 2. Vattivara Mureling 3. Gr ded Bunding 4. Stone Terracing 5. Rock bill drains 6. Stone Checks 7. Diversion drains 8. New Tanks	0.0035 Hect. 0.0145 " 0.0006 " 0.0012 Hqs. 0.0045 No.1 0.0005 1 Km. 0.050 1 Hec	16.17	4.03	
3.	Paderu	4597	1. Vattivara Planting 2. Vattivara Mureling 3. Rockbill drains 4. Gully Structures 5. Breaked Jams 6. Stone Checks 7. Diversiondrains 8. Water Harvesting Structure	0.0001 Hect. 0.009 " 0.0015 " 0.0015 " 0.0002 " 0.00005 " 0.003 1 Km. 0.075 No.1	3.63	0.91	
4.	Ramp chodavaram	14031	1. Vattivara Mureling 2. Vattivara Bunding 3. Gully Plugging 4. Diversion Drains 5. Water harvesting structure	0.011 Hc. 0.0001 " 0.0015 " 0.003 " 0.050 "	3.69	0.94	
					39.63	7.46	37.29

39031

S.No.	Description of work	Rate	For	Amount	S.No.	Description	Quantity	Rate	Per	Amount
		Rs.	Sq.mts.	Rs.				Rs.	Cum.	Rs.
1.	4,500 Sq.mts. Clearing away Light Jungle.	1.55	10 Sq.mts.	667	I	Materials:				
2.	1170 Cums. Earth work excavation and depositing on bank with an initial lead of 10 Metres and lift of 2 Metres in loamy and clayey soils like black cotton soil, red earth and ordinary gravel S.S. 20 - B.	65.00	10 Cum.	7605	1.	Cement	23.40	1200.00	1 M.T	28080
3.	200 Cums. Earth work excavation and depositing on banks with an initial lead of 10 Mts. and lift of 2 Mts. in loamy and clayey soils like black cotton soils, red earth and ordinary gravel S.S.No. 20 - A.	70.00	10 Cum.	1400	2.	40 MM. H.B.G.Metal	66.00	55.80	1 Cum.	3881
4.	130 Cums. Fissured and Fractured rock and boulders upto 3 Cum. in size requiring blasting.	28.10	1 Cum.	3653	3.	20 MM. H.B.G.Metal	48.00	53.40	1 Cum.	4483
5.	76 Cums. C.C. (1:3:6) using 60% of 40 MM. size H.B.G.Metal and 40% of 20 MM. size H.B.G.Metal for foundation.	453.00	1 Cum.	34428	4.	Sand	57.00	4.50	1 Cum.	257
6.	43 Cums. C.C. (1:3:6) using 60% of 40 MM. size H.B.G.Metal and 40% of 20 MM. size H.B.G.Metal for body wall.	571.00	1 Cum.	24553	5.	Rough stone 300 MM. size	92.00	10.50	1 Cum.	1040
7.	4 Cums. C.C. (1:2:4) using 20 MM. size H.B.G.Metal for wearing coat.	718.00	1 Cum.	2872	II.	Conveyance Charges:				12032
8.	40 Cums. Rough stone dry pecking 300 MM. thick for aprons.	67.00	1 Cum.	3480	III.	Supplying R.C.C. Hume Pipes				2000
9.	50 Cums. Rough stone dry pecking 300 MM. thick for side revetment.	90.00	1 Cum.	4500	IV	Supplying wooden shutters				1200
10.	L.S Provision for supply of H.C.C.Hume pipes and collars.	L.S		2000	V	Seizureage and cess charges.				2527
11.	L.S Provision for supplying and fixing wooden shutters in the scour vests.	L.S		1200	VI.	Labour Charges.				35000
12.	L.S Provision for forming approach to work site.	L.S		1500						
13.	L.S Provision for P.S and continuing fences at 3/4.	L.S		2642						
		Total		90500				Total		90500

Sl. No.	Particulars	Area proposed	Nature of works	Unit cost	Total amount required	I.V.A.D.	State share
	Sachinapur						
1.	Pottakavulasa	2648	1. Graded Bunding	0.0015	3.97	3.18	0.79
2.	Puguligachia	1299	2. Stone facing	0.0015	1.95	1.56	0.39
3.	Polingachia	394	3. Bench facing	0.0015	1.34	1.07	0.27
4.	Chulligachia	441	4. Gully construction	0.0015	0.66	0.53	0.13
	Sub - Total:	5382			8.92	6.34	1.58
	PALVAHUPUR						
1.	Gumdingachia	2089	1. Vattiveru planting	0.0005 Hect.	2.59	2.07	0.52
2.	Pedagachia	1725	2. Vattiveru nursing	0.0145 "	3.71	2.17	0.54
3.	Petingachia	1580	3. Graded Bunding	0.0006 "	1.70	1.56	0.14
4.	Itchapur	1573	4. Stone facing	0.0012 Hect.	2.00	1.56	0.34
5.	Jayavali	1522	5. Rock bill drains	0.0015 Nos.	1.93	1.56	0.40
6.	Gomahli	1116	6. Stone checks	0.0005 Nos.	1.16	0.98	0.39
7.	Venguruchi	1165	7. Diversion drains	0.003/1 km.	1.51	1.21	0.23
8.	Palipavali	839	8. New tanks	0.05/ 1 no.	1.07	0.86	0.21
9.	Vasithigachia	1007		1.00	1.25	0.89	0.20
10.	Juvannamachia	876		1.25	1.00	0.86	0.25
11.	Petingachia-II	731		1.27	1.02	0.86	0.25
12.	Pedachimondagachia	803		30.20	16.17	12.00	24.03
	Sub-total:	15176					
	PADURU						
1.	311eruvu	3761	1. Vattiveru planting	0.0001 Hect.	3.10	2.48	0.62
2.	Champavathi	68	2. Vattiveru nursing	0.009 "	0.02	0.02	0.005
3.	Kostimani	39	3. Rockbill Drains	0.0015 "	0.57	0.45	0.12
4.	Sarada	449	4. Gully structures	0.0015/Hect.	0.20	0.16	0.04
5.	Shervu	130	5. Bushwood Dams	0.0002/ "	0.26	0.21	0.05
6.	Yanata	20	6. Stone checks	0.0005/Hect	0.16	0.13	0.03
7.	Shanava	70	7. Diversion Drains	0.003/ 1km.	0.23	0.018	0.05
	Sub - Total:	4597	8. Water Harvesting structures	0.075/No.1		3.63	0.915
	REAPACHEDAVARAM						
1.	Shiluvu	1999	1. Vattiveru nursing	0.011/Hect.	1.03	0.82	0.21
2.	KancharaGodavari	1639	2. Vattiveru Bunding	0.0001/Hect.	0.48	0.38	0.10
3.	Pannaluru	3664	3. Gully plugging	0.0015/Hect.	1.53	1.22	0.31
4.	Karpa	764	4. Diversion Drains	0.003/ 1 Km.	0.18	0.14	0.04
5.	Vanchangi	411	5. Water Harvesting structure	0.050/No.1	0.46	0.37	0.09
6.	Subbapalle	4873		0.79	0.63	0.63	0.16
7.	Tattikalva	381		0.16	0.16	0.13	0.03

HORTICULTURE PLANTATIONSUNIT COSTS - IPDA-WISE

Plantation	Seethampeta	Parvathipuram	Paderu	R.Chodavaram
1. Horticulture	8500	8500	8500 (Mixed)	8500 (Economic & mixed)
2. Saffron	--	--	--	28815
2. Coffee	--	--	--	--
3. Coffee + Pepper	--	--	35355	--
4. Pepper	--	--	--	2455
5. Rubber	--	--	--	18800
6. Citronella	--	--	--	5000

PLANTATION-WISE IPDA-WISE UNIT COSTS

		Unit Cost (Rs.)
1. <u>Seethampeta</u>		8500
1. <u>Horticulture</u>		
I year	2729	
II	2031	
III	1740	
IV	810	
V	1190	8500
2. <u>Parvathipuram</u>		8500
<u>Horticulture</u>		
I year	5020	
II	1540	
III	980	
IV	580	
V	380	8500
3. <u>Paderu</u>		8500
1. <u>Mixed plantations</u>		
I year	3370	
II	1655	
III	1475	
IV	1600	8500
V	400	

2. Coffee + Pepper

		<u>Coffee</u>	<u>Pepper</u>	<u>UNIT COST</u>
a) Shade	(b)			
	I	6490	685	Shade 6325
I- 5725	II	2325	215	Coffee 26575
II- 600	III	2160	230	Pepper 2455
	IV.	3440	210	-----
6325	V.	3840	335	35355
	VI.	4060	370	-----
	VII	4260	410	
		-----	-----	
		26575	2455	
		-----	-----	

4. Rampachodavaram

1. Economic plantations + Orchards 8500

I	2370
II	2650
III	1680
IV.	1520
V.	280

28815

2. Coffee

I.	8730
II	2325
III	2160
IV.	3440
V	3840
VI	4060
VII	4260

28815

3. Pepper-Rs. 2455

I.	685
II	215
III	230
IV	210
V	335
VI:	370
VII	410

2455

4) Rubber

I	7600
II	3200
III	2500
IV	1900
V	1300
VI	1200
VII	1100

Rs. 18800

18800

5. Citronella

Rs. 5000

PROPOSED PLANTATION SCHEME FOR SHIPPING CULTIVATORS:

ANNEXURE -XXIII.A

Sl. No.	I.F.A. Watershed	Total Number of Podu families	Total extent of Podu land	Schemes proposed/ Unit cost	No. of benefici- ciaries to be covered	Extent of Podu land to be cov- ered.	Total Amount Required			Remarks	
							I.F.A.D.	State share	Total		
<u>SENEMAPPIA</u>											
		4264	2648	Cashew-196 7x7ft	4854	2648	18.01	4.50	22.51		
1.	Pottikavalasa	2101	1233	Custard apple (1.5x2.5)	10.0085 3101	1233	8.83	2.21	11.04		
2.	Kusinigadda	1773	834	Acacia	917	441	3.00	0.75	3.75		
4.	Gajjiligadda	917	441	Acacia (5x2.5)	80		35.91	8.98	44.89		
Total:		9051	5282	Yegisa, Hallamaddi and teak -80 =500	9051	5282					
<u>PARVATHIPURAM</u>											
1.	Gurmadigadda	1103	965	Cashew-150 (7x7ft)	0.0085	1103	6.56	1.64	8.20		
2.	Pedagadda	1208	953	Subabul-50		1208	6.48	1.62	8.10		
3.	Pedagadda	1049	824	Acacia-50		1049	5.60	1.40	7.00		
4.	Itchapuram	972	820	Soapnut & Tamarind		979	820	5.53	1.40	6.93	
5.	Magavali	777	784	Bamboo		777	784	5.34	1.33	6.67	
6.	Gomukhi	504	485	Yegisa etc.150		504	485	3.30	0.82	4.12	
7.	Vegavathi	538	485	Total: 450		538	485	3.30	0.82	4.12	
8.	Puliputti	696	474			696	474	3.22	0.81	4.03	
9.	Vettigadda	462	463			462	463	3.15	0.79	3.94	
10.	Suvarnamukhi	483	437			462	463	2.97	0.74	3.71	
11.	Pedagadda-11	433	435			483	435	2.96	0.74	3.70	
12.	Pedasekhakondagadda	464	271			433	271	2.96	0.46	2.30	
Total:		8696	7396			464	271	1.84	0.46	2.30	
							50.30	12.57	62.87		
<u>PADERU</u>											
1.	Sileru	21481	16972	Mixed plantation of cashew,Guava, pomegranate,Litchi	0.0085	5556	4709	49.23	12.31	61.54	
2.	Sarada	1839	1872	Bamboo, silver Oak		997	677	8.91	2.23	11.14	
3.	Gosthani	817	1485	coconut, Mango;		322	318	2.34	0.58	2.92	
4.	Thandava	422	441	subabul&tamarind		300	200	0.71	0.18	0.89	
5.	Yeleru	509	469	Coffee&Pepper		120	105	1.36	0.34	1.70	
6.	Champavathi	117	152			80	40	0.68	0.17	0.85	
7.	Varaha	138	138			150	100	0.27	0.07	0.34	
Total:		25383	21529			7525	6149	63.50	15.88	79.38	
<u>RAMPACHODAVARAM</u>											
1.	Seethanpalli	2494	2598	Rubber- 0.0188		2494	2494	15.38	3.99	19.37	
2.	Pamuberu	1858	1931	economic-0.0085 plantation		1858	1370	19.19	4.80	23.99	
3.	Sileru	956	1172	Orchards-0.0085		956	619	6.99	1.75	8.74	
4.	Godavari	846	882	Pepper -0.0025		846	846	5.75	1.44	7.19	
5.	Pampa	390	364	Coffee- 0.0288		390	390	2.66	0.66	3.32	
6.	Yettikalwa	177	165	citronella 0.0050		177	177	1.20	0.30	1.50	
7.	Vanenala	150	140			150	150	1.02	0.26	1.28	
Total:		6871	7252			6871	6046	52.79	13.20	65.99	
GRAND TOTAL:							32143	24873	222.50	50.63	253.13

ITDA - ITSE AREA PLANTING UNDER PLANTATION PROGRAMMS

Sl. No.	I.T.D.A.	Plantation	(Hectares)											T O T A L
			1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99		
1	2	4	5	6	7	8	9	10	11	12	13	14		
1. JALNARIPADA			530	528	528	528	528	528	528	528	528	528	528	
Mixed Horticulture													5282	
2. PARVATHIPURAM			745	739	739	739	739	739	739	739	739	739	7396	
Mixed Horticulture														
3. PABBE			515	515	515	515	515	515	515	515	515	515	5141	
i) Mixed Horticulture														
ii) Coffee + Pepper			144	144	144	144	144	144	144	144	144	144	1008	
Sub-Total			659	659	659	659	659	659	659	659	659	659	6149	
4. RANGACHODA-VARELI			435	435	435	435	435	435	435	435	435	435	4358	
i) Economic Plantations + ORCHARDS														
ii) Coffee			45	45	45	45	45	45	45	45	45	45	400	
iii) Pepper			13	13	13	13	13	13	13	13	13	13	120	
iv) Rubber			90	90	90	90	90	90	90	90	90	90	810	
v) Citronella			35	35	35	35	35	35	35	35	35	35	350	
Sub-Total:-			618	618	618	618	618	618	618	618	618	618	6046	
Grand TOTAL:-			2552	2544	2544	2544	2544	2544	2544	2400	2406	2251	24873	

EXTENT OF LAND HELD BY PODU CULTIVATORS

(Area in Hectares)

Sl. No.	I.T.D.A. Water shed	Total No of Podu families	Total extent of land held by Podu Cultivators				Average size of land holding		
			Dry	Wet	Podu	Total	Dry	Wet	Podu
<u>Seethampeta</u>									
1.	Pottikavalasa	4254	515	1701	2648	4864	0.12	0.40	0.62
2.	Musimigedda	2101	60	62	1299	1421	0.03	0.03	0.62
3.	Pollagedda	1779	122	43	834	1066	0.07	0.03	0.50
4.	Gajjiligedda	917	37	38	441	516	0.04	0.04	0.48
Total:		9051	741	1844	5282	7867	0.08	0.20	0.59
<u>PARVATHIPURAM</u>									
1.	Gummidigedda	1103	416	10	365	1421	0.40	0.01	0.88
2.	Pedagadde	1208	502	194	953	1655	0.42	0.16	0.79
3.	Pedagadde-1	1049	346	79	824	1249	0.33	0.08	0.78
4.	Itchapuram	979	1425	181	820	2426	1.46	0.18	0.84
5.	Nagavali	777	276	--	784	1060	0.35	--	1.01
6.	Gomukhi	504	343	36	485	864	0.68	0.07	0.96
7.	Vegavathi	538	372	29	485	893	0.70	0.06	0.96
8.	Puliputti	696	262	79	474	815	0.38	0.11	0.68
9.	Vettigadde	462	493	35	463	991	1.07	0.07	1.00
10.	Suvarnamukhi	483	261	103	437	719	0.60	0.24	1.00
11.	Pedagadde-11	433	261	22	435	799	0.60	0.05	0.58
12.	Pedasekha kondagadde	464	541	22	271	834	0.96	0.05	0.58
Total:		8696	5559	771	7396	13726	0.64	0.09	0.85
<u>PADERU</u>									
1.	Sileru	21481	16972	--	16972	33944	0.79	--	0.79
2.	Sarada	1839	1502	370	1872	3744	0.82	0.20	1.02
3.	Gosthani	817	1485	--	1485	2970	1.82	--	1.82
4.	Yeleru	509	469	--	469	938	0.92	--	0.92
5.	Thandava	482	441	--	441	882	0.91	--	0.91
6.	Champavathi	117	152	--	152	304	0.31	--	1.30
7.	Varaha	138	138	--	138	276	1.30	--	1.00
Total:		25383	21159	370	21529	43058	1.00	0.01	0.85
<u>RAMPACHODAVARAM</u>									
1.	Seethapalli	2494	2182	35	2598	4815	0.87	0.01	1.05
2.	Pamleru	1858	1764	43	1931	3738	0.05	0.02	1.04
3.	Sileru	956	734	24	1172	1930	0.77	0.03	1.22
4.	Pampa	390	318	4	364	686	0.82	0.01	0.93
5.	Godavari	846	703	30	882	1615	0.83	0.04	1.04
6.	Yettikalva	177	159	13	165	324	0.90	0.09	0.93
7.	Vanchangi	150	95	--	140	245	0.95	--	1.05
Total:		6871	5955	149	7252	13356	0.87	0.02	1.05
GRAND TOTAL:		50001	33414	3134	41459	78007	0.67	0.06	0.83

SEED EXCHANGE

(Rs. in Millions)

Sl. No.	I.T.D.A.	No. of Beneficiaries.	Extent Purposed			Unit cost per hectare	Total cost	IPAD 80%	State 20%
			Milletts	Pulses	Oil seeds				
1	2	3	4	5	6	7	8	9	10
1.	SERTHAMPET	1263	693	—	43	Ragi - Rs. 20.00 Bajra - Rs. 45.00 Jowar - Rs. 80.00 Maize - Rs. 80.00 G.Nut. Rs. 1050.00	0.07	0.06	0.01
2.	PARVATHIPURAM	6085	4603	945	—	Bajra Rs. 45.00 Ragi Rs. 20.00 Pulses Rs. 250.00	0.46	0.37	0.09
3.	PADESHI	4003	2213	—	190	Groundnut Rs. 1000.00 Milletts Rs. 80.00 Other Oil Seeds Rs. 60.00	0.35	0.28	0.07
4.	RAMPACHO AVARAM	6871	4518	—	2204	Milletts Rs. 80.00 Oil seeds Rs. 60.00	0.55	0.44	0.11
GRAND TOTAL:-			18222	12032	945	2437	1.43	1.15	0.28

Sl. No.	I.T.A./ Attached	No. of Beneficiaries	Total Extent to be Covered (Hec)			Total Extent	Unit Cost	TOTAL AMOUNT REQUIRED		
			Millets	Pulses	Oil Seeds			I.T.A.D. 80%	State 20%	Total
1	2	3	4	5	6	7	8	9	10	11
I. SIDDHAPUR:										
1.	Pottilavilasa	863	502	-	13	515	1. Bajra Rs. 20/-	0.027	0.007	0.034
2.	Mashigeida	103	46	-	14	60	2. Bajra Rs. 45/- 3. Jowar Rs. 60/- 4. Millets Rs. 80/-	0.014	0.003	0.017
3.	Pollageida	219	138	-	11	129	5. Ground Nut Rs. 1050/-	0.013	0.003	0.016
4.	Gajjeligada	75	32	-	5	37		0.005	0.001	0.006
Sub-Total:-		1263	698	-	43	741		0.059	0.014	0.073
II. PAVALPUR:										
1.	Gumidigada	648	405	45	-	450		0.026	0.005	0.032
2.	Peddigada	739	442	56	-	508	1. Bajra Rs. 45/- 2. Bajra Rs. 20/- 3. Pulses Rs. 250/-	0.029	0.003	0.037
3.	Peddigada-1	302	256	50	-	346		0.022	0.005	0.027
4.	Ichayada	993	1132	233	-	1415		0.094	0.023	0.117
5.	Nagavadi	469	233	43	-	276		0.017	0.004	0.021
6.	Gomthi	367	207	56	-	343		0.020	0.005	0.025
7.	Vasavai	350	306	75	-	379		0.026	0.007	0.033
8.	Paliputti	435	215	47	-	262		0.017	0.005	0.022
9.	Vattigada	375	346	147	-	493		0.042	0.010	0.052
10.	Juvamandla	373	219	55	-	274		0.019	0.005	0.024
11.	Peddigada-11	296	220	41	-	261		0.017	0.004	0.021
12.	Peddigada-12	533	452	39	-	541		0.036	0.009	0.045
Sub-Total:-		6035	4603	345	-	5548		0.365	0.091	0.456
I. PANDUR:										
1.	Sileru	2024	1733	-	130	1863	1. Millets Rs. 80/-	0.190	0.045	0.238
2.	Saxada	435	210	-	20	230		0.015	0.004	0.019
3.	Gogthazai	237	145	-	20	155	2. Oilseeds Rs. 60/-	0.027	0.007	0.034
4.	Thandam	160	60	-	10	70		0.026	0.007	0.033
5.	Charavandi	35	25	-	5	30		0.006	0.002	0.008
6.	Yelera	165	40	-	5	45	3. Ground nut Rs. 1000/-	0.014	0.003	0.017
Sub-Total:-		4003	2213	-	190	2403		0.278	0.071	0.349
1.	Bothipalli	2494	1500	-	51	2459	1. Millets Rs. 80/-	0.073	0.020	0.093
2.	Pasuluru	1356	1214	-	601	1015		0.043	0.012	0.056
3.	Sileru	956	664	-	263	932		0.022	0.005	0.027
4.	Chandrabodhan	846	557	-	259	816	2. Oilseeds Rs. 60/-	0.010	0.003	0.013
5.	Paaya	390	257	-	129	306		0.009	0.002	0.011
6.	Yattikallu	177	126	-	51	177		0.143	0.036	0.179
7.	Venonangi	150	92	-	45	137		0.129	0.032	0.161
Sub-Total:-		6071	4518	-	2204	6722		0.139	0.110	0.249
GRAND TOTAL:-		12222	12032	945	1544	15414		1.141	0.286	1.427

IRRIGATION FACILITIES.

(Rs. in Millions)

Sl. No.	I.T.D.A.	No. of Beneficiaries.	Extent to be covered.	O.I. WELLS			L.I. SCHEMES			CHECK DAMS			TANKS			PADDY			TOTAL AMOUNT REQUIRED.			
				No. required.	Unit cost.	Total Amount.	No. required.	Unit Cost.	Total Amount.	No. required.	Unit Cost.	Total Amount.	No. required.	Unit Cost.	Total Amount.	Extent.	Unit Cost.	Total Seed Requi.	Total Amount.	I.F. A.D.	State 60%	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1.	SELAMAPET	1964	1344	-	-	-	4	0.725	2.900	23	0.035 to 0.050	1.950	18	0.015	0.270	1844	0.0003	133300	0.550	1.134	4.536	5.670
2.	PARVATHIPURAM	1224	781	235	0.01	2.35	3	1.00	3.00	35	0.035 to 0.10	2.785	16	0.015	0.240	774	0.0003	50050	0.233	1.722	6.836	8.603
3.	PADURU	4903	3310	57	0.25	1.43	15	0.20	3.00	68	0.05 to 0.20	6.620	31	0.015	0.465	907	0.0003	67000	0.242	2.351	9.406	11.757
4.	RAMPACHONAVARAM	N.F.	149	-	-	-	-	-	-	95	0.10	9.50	-	-	-	143	0.00035	N.F.	0.353	1.910	7.643	9.553
Grand Total:-		6094	6084	292		3.78	22		8.90	221		20.055	65		0.975	3674			1.076	7.117	20.471	35.568

ADDITIONAL IRRIGATION REQUIREMENTS IN THE PROJECT AREA

(Rs in millions)

Sl. No.	I.R.D. No.	C.I. Wells			L.I. Schemes			Check dams			Tanks			Total cost		
		No. re-quired	Unit cost	Total Amount	No. re-quired	Unit cost	Total Amount	No. re-quired	Unit cost	Total Amount	No. re-quired	Unit cost	Total Amount	I.P.A.D. 20%	State 80%	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Seethampeta	-	-	-	4	0.725	2.90	3	0.055 to 0.50	1.250	-	-	-	0.830	3.320	4.150
2.	Pavvathipuram	2.35	0.01	2.35	3	1.00	3.00	24	0.10	2.400	-	-	-	1.550	6.200	7.750
3.	Paderu	-	-	-	-	-	-	25	0.05 to 0.20	4.470	-	-	-	0.894	5.576	4.47
4.	Rampachoduvanam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL :		2.35	-	2.35	7	-	5.90	52	-	3,120	-	-	-	3.274	13,096	16,370

SYSTEMATIC LAND DEVELOPMENT WORKS FOR IRRIGATED AREAS

(Rs. in Millions)

S.No.	I.T.D.A.	Extent to be covered	Type of works to be taken up.	Unit cost	Total amount	Amount required	
						IFAD 80%	State share 20%
1	2	3	4	5	6	7	8
1.	Seethampeta	1844	Formation of Bench Terracing, Land reclamation, stone bunding	0.004	7.376	5.901	1.475
2.	Parvatipuram	781	Formation of Bench Terracing, Land Reclamation, Stone terracing	0.004	3.124	2.500	0.624
3.	Padarnu	7523	1. Levelling of land for Wet paddy 2. Graded bunding 3. Stone bunding 4. Reclamation	0.005 0.001 0.0025 0.005	17.393	13.914	3.479
4.	Rampachodyaram	950	Land development	0.001	0.950	0.760	0.190
Grand Total:		11103			28.843	23.075	5.768

SYSTEMATIC LAND DEVELOPMENT

(Rs. in Millions)

No.	I.P.D.A. Watershed-wise	No. of Benefi- ciaries	Percent to be covered	Unit out- lay	Amount required for systematic Land Develop		
					IPAD(80%)	State(20%)	Total.
	<u>SERUNIPETA</u>						6.804
	Pottikevalasa	1696	1701	0.004	5.443	1.361	6.804
	Kusirigadda	126	62	0.004	0.198	0.050	0.248
	Pollagedda	43	43	0.004	0.138	0.034	0.172
	Gajjiligedda	38	38	0.004	0.122	0.030	0.152
	sub-total:	1904	1844	0.004	5.901	1.475	7.376
	<u>PARVATHIPURAM</u>						0.040
	Gummadigedda	10	10	0.004	0.032	0.008	0.040
	Peddagedda		104	0.004	0.621	0.155	0.776
	Peddagedda-I		79	0.004	0.253	0.063	0.316
	Itchapurem		101	0.004	0.611	0.153	0.764
	Magavali		36	--	--	--	0.144
	Gonukhi		29	0.004	0.115	0.029	0.144
	Vegavathi		79	0.004	0.093	0.023	0.116
	Puliputti		35	0.004	0.253	0.063	0.316
	Vettigedda		3	0.004	0.112	0.028	0.140
	Suvarnamukhi		103	0.004	0.100	0.025	0.125
	Peddagedda-II		22	0.004	0.010	0.002	0.012
	Pedasekha/Kondagedda		781	0.004	0.330	0.082	0.412
	sub-total:				2.500	0.624	3.124
	<u>PADERU</u>		5354	0.005	9.325	2.331	11.656
	Sileru		84	0.005	0.099	0.025	0.124
	Sarada		309	0.005	0.651	0.163	0.814
	Gosthani		1062	0.005	2.438	0.610	3.048
	Tandava		310	0.005	0.624	0.156	0.780
	Yeleru		118	0.005	0.200	0.050	0.250
	Champa		231	0.005	0.577	0.144	0.721
	Varaha		7523	0.005	13.914	3.473	17.383
	sub-total:						0.180
	<u>RAIBACHODAVARAM</u>		180	0.001	0.144	0.036	0.180
	Gesthapalli		280	0.001	0.224	0.056	0.280
	Pamuleru		320	0.001	0.256	0.064	0.320
	Sileru		40	0.001	0.032	0.008	0.040
	Bedavari		50	0.001	0.040	0.010	0.050
	Pampa		20	0.001	0.016	0.004	0.020
	Yettikalva		60	0.001	0.048	0.012	0.060
	Vanchanti		950	0.001	0.760	0.190	0.950
	sub-total:		11103		23.075	5.768	28.843
	GRAND TOTAL:						

1.
2.
3.
4.
5.
6.
7.
8.

DEVELOPMENT OF COMMUNITY SERVICES

(Rs. in Millions)

Sl. No.	Name of the Scheme	Sectmassetta			Pervatidourra			Paduru			Rajachodavara			Total amount Required		
		I.F.A.D. 20%	State 80%	Total	I.F.A.D. 20%	State 80%	Total	I.F.A.D. 20%	State 80%	Total	I.F.A.D. 20%	State 80%	Total	I.F.A.D. 20%	State 80%	Total
1.	Medical, Health & Nutrition.	0.60	2.40	3.00	3.79	15.17	18.96	-	-	-	0.19	0.77	0.96	4.53	18.34	22.92
2.	Education	1.50	5.98	7.48	7.52	30.08	37.60	1.54	6.18	7.72	2.26	9.03	11.29	12.82	51.27	64.09
3.	Drinking Water	0.02	0.10	0.12	1.12	4.50	5.62	-	-	-	-	-	-	1.15	4.59	5.74
4.	Housing	3.36	13.44	16.80	1.46	5.34	7.30	6.46	25.84	32.30	2.81	11.23	14.04	14.09	56.35	70.44
5.	Public Distribution	0.60	2.40	3.00	1.10	4.40	5.50	-	-	-	0.09	0.30	0.47	1.79	7.18	8.97
6.	Electricity	0.40	1.60	2.00	1.92	7.66	9.58	0.59	2.34	2.93	3.10	12.40	15.50	6.00	24.01	30.01
7.	Civic Amenities	-	-	-	0.25	0.93	1.23	-	-	-	0.06	0.24	0.30	0.31	1.22	1.53
8.	Roads	1.76	7.04	8.80	24.88	99.51	124.39	3.02	12.09	15.11	2.73	11.12	13.90	32.44	129.76	162.20
9.	Buildings	0.47	1.90	2.37	6.18	24.71	30.89	-	-	-	2.40	9.64	12.04	9.06	36.24	45.30
Grand Total:-		8.71	34.86	43.57	48.22	192.55	241.07	11.61	46.45	58.06	13.69	54.31	68.50	82.23	328.97	411.20

DEVELOPMENT OF MARKETING AND PROCESSING FACILITIES

(₹. in Millions)

Sl. No.	Scheme	SEETHAMPETA			PARVATI PURAM			PADERU			RAIPACHODAVARAM			TOTAL AMOUNT REQUIRED.		
		IFAD	State	Total	IFAD	State	Total	IFAD	State	Total	IFAD	State	Total	IFAD	State	Total
		80%	20%		80%	20%		80%	20%		80%	20%		15	16	17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Processing Units	1.76	0.44	2.20	2.40	0.60	3.00	4.34	1.09	5.43	0.91	0.23	1.14	9.42	2.35	11.77
2.	Warehousing & Marketing	2.24	0.56	2.80	4.08	1.02	5.10	2.96	0.74	3.70	0.32	0.08	0.40	9.60	2.40	12.00
3.	Standardised equipment	0.08	0.02	0.10	0.31	0.08	0.39	0.38	0.09	0.47	0.04	0.01	0.05	0.81	0.20	1.01
4.	Assistance to Tribal youth (ISB) through Self Employment	0.32	0.08	0.40	1.20	0.30	1.50	4.97	1.24	6.21	0.08	0.02	0.10	6.57	1.64	8.21
5.	Extension education	0.16	0.04	0.20	1.20	0.30	1.50	0.61	0.15	0.76	0.016	0.004	0.02	1.90	0.50	2.40
Grand Total		4.56	1.14	5.70	9.19	2.30	11.49	13.26	3.31	16.57	1.366	0.344	1.71	23.38	7.09	35.47

SCHEME FOR MANUFACTURE OF CASHEW KERNEL

- I. Introduction indicating potential and manufacturing process (Brief) } There is good demand for cashew kernel.
- The Scheme is worked out for processing of 20 bags/day or 500 bags per month (40000 Kgs.)

	<u>Non-Recurring</u> (Rs)
II. <u>Machinery and equipment:</u>	45,000.00
i) Cashew cooker with cutter	50,000.00
ii) Electronic peeling unit	
III. <u>Lands and Buildings:</u>	
i) Site for construction of Buildings (Acres.0.50)	10,000.00
ii) (a) Breaking shed 180 x 25'	
2000 sq.ft.	
(b) Hot House (peeling of the kernel electronic peeling unit) 20 x 20 = 400 Sq.ft.	
(c) Roasting area (cashew cooker) 25 x 20 = 500 Sq.ft.	
(d) Peeling area 20 x 20 = 400 Sq.ft.	
(e) Godown 20 x 12 = 240 Sq.ft. (500 bag capacity)	
(f) Office Building 10' x 10' = 100 Sq.ft.	
(g) Labour quarter - 3 (10' x 15' x 3) = 450 Sq.ft.	
Total plinth area required for all sheds and buildings 4190 or 4200 Sq.ft.	
B. Cost of sheds and buildings }	4,19,000.00
4190 x 100	5,000.00
IV. Electric installation	
Total recurring	Rs. 5,24,000.00

<u>RECURRING EXPENDITURE</u>		(Rs)
V.	Raw material required (P.M.) Raw cashewnuts 500 bags	5,00,000.00
VI.	<u>Salaries and wages per month:</u>	
	a) Roasting @ 2.50 1 bag of 80 Kgs. 500 x 2 = 50	1,250.00
	b) Braising of cashew nut @ Rs.1.20 Kg. (500 x 80 x 1.20)	48,000.00
	c) Peeling of kernel @ Rs.0.70 kg. (500 x 80 x 0.70)	28,000.00
	d) Labour wages required at Electric peeling unit @ 12 for two trips for 10 bags (12 x 50)	600.00
	e) Packing section (2 per month) workers 350 + 350)	700.00
	f) Cost of Tin, Paper, Gunny, Stitching etc (10+5) for 10 kgs. of Kernel. 15 x 800	1,200.00
	g) Weighment and unloading charges @ Rs.2-00 2 x 50	800.00
	h) Tinkering charges for each Rs.1-00	500.00
	i) Salary of one clerk	500.00
	j) Electricity (power charges)	500.00
	Total Non-Recurring Rs.	<u>5,93,350.00</u>
VII.	<u>Working capital per month:</u>	
	i) Raw material	5,00,000.00
	ii) Wages and Salaries	91,650.00
	iii) Cost of Tin, Gunny, Electricity charges other misc. expenditure	1,700.00
		<u>5,93,350.00</u>
VIII.	<u>Total investment:</u>	
	1) Machinery and equipment	95,000.00
	2) Site cost	10,000.00
	3) Cost of Buildings	4,19,000.00
	4) Working capital	5,93,350.00
		<u>11,17,350.00</u>
IX.	<u>Manufacturing cost per month:</u>	
	1) Working capital for one month	5,93,350.00
	2) Depreciation on machinery (10%)	100.00
	3) Interest 15%	13,330.00
		<u>6,06,780.00</u>
X.	<u>Receipts:</u> By sale of Kernel of 8000 Kg at Rs.90 Kg. (Recovery per 100 kg. q. cashew nut 20 kg. kernel is the recovery.)	7,20,000.00
XI.	<u>Profit and Loss/Month</u>	
	1) Receipt as per X	7,20,000.00
	2) Manufacturing cost as per IX	6,06,780.00
	PROFIT:-	<u>Rs. 1,13,220.00</u>

TRAINING PROGRAMMES

(Rs. in Millions)

Sl. No.	Name of the Scheme	SASELA PETA				PAVATHIPURAM				PADSERU				RAMPACHODAVARAM				TOTAL AMOUNT.			
		No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1.	Training Tribal youth in vegetative propagation and Horticultural technology.	1200	0.05	0.22	0.27	25	0.03	0.14	0.17	330	0.19	0.75	0.94	-	-	-	-	1555	0.27	1.11	1.38
2.	Training of tribal farmers in Drylan. farming techniques & Soil conservation.	1800	0.05	0.22	0.27	50	0.06	0.26	0.32	330	0.10	0.30	0.43	70	0.004	0.014	0.018	2250	0.214	0.874	1.088
3.	Training in self employment programmes. Like Cycle, & Motor Cycle repairing and Carpenters training.	-	-	-	-	-	-	-	-	72	0.07	0.27	0.34	10	0.007	0.027	0.034	82	0.077	0.297	0.374
4.	Training for Tribal youth and Women in Silk worm rearing and Silk production.	-	-	-	-	10	0.03	0.11	0.14	220	0.07	0.23	0.35	-	-	-	-	230	0.10	0.39	0.49
5.	Training of tribal youth in identification and processing of Ayurvedic Herbs and Medicinal plants.	-	-	-	-	20	0.03	0.11	0.14	220	0.03	0.12	0.15	14	0.037	0.147	0.134	254	0.097	0.377	0.474
6.	Strengthening of Horticulture farms.	-	0.17	0.67	0.84	-	-	-	-	-	0.12	0.43	0.60	-	-	-	-	-	0.29	1.15	1.44
7.	Strengthening of APAU Research Station	-	0.29	1.17	1.46	-	0.20	0.80	1.00	-	0.12	0.48	0.60	-	-	-	-	-	0.61	2.45	3.06
8.	Training of Horticulture staff.	-	-	-	-	-	-	-	-	42	0.008	0.032	0.040	-	-	-	-	42	0.008	0.032	0.040
9.	Training of engineering & Soil conservation staff in Land development and Soil conservation techniques.	-	-	-	-	-	-	-	-	53	0.01	0.04	0.05	-	-	-	-	53	0.01	0.04	0.05
10.	Training of superior staff	-	-	-	-	-	-	-	-	5	0.002	0.003	0.010	-	-	-	-	5	0.002	0.003	0.010
11.	Training of Monitoring and Evaluation staff.	-	-	-	-	-	-	-	-	4	0.002	0.006	0.008	5	0.005	0.018	0.023	9	0.007	0.024	0.031
12.	Vocational training Exclusively for Women.	-	-	-	-	-	100	0.07	0.23	0.35	-	-	-	-	-	-	-	100	0.07	0.23	0.35
13.	Training to the Beneficiaries in Minor irrigation.	-	-	-	-	-	10	0.002	0.006	0.008	-	-	-	-	-	-	-	10	0.002	0.006	0.008
14.	Training in Animal Husbandry	-	-	-	-	-	10	0.03	0.11	0.14	-	-	-	-	-	-	-	10	0.03	0.11	0.14
15.																					

Sl. No.	Name of the Scheme	SEMMLUPPET				PARVATHIPURAM				PADEMI				RAIPACUDAVARAM				TOTAL AMOUNT			
		No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total	No. of Trainees	I.F. A.D.	State	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
15.	Training of beneficiaries in bee keeping	-	-	-	-	20	0.03	0.11	0.14	-	-	-	-	50	0.015	0.060	0.075	70	0.045	0.17	0.215
16.	Training to teachers in health development and regularity Mechanism	-	-	-	-	-	-	-	-	-	-	-	-	127	0.063	0.251	0.314	127	0.063	0.251	0.314
17.	Training to Division workers.	-	-	-	-	-	-	-	-	-	-	-	-	69	0.027	0.108	0.135	69	0.027	0.103	0.135
18.	Training in Tailoring	-	-	-	-	-	-	-	-	-	-	-	-	10	0.007	0.027	0.034	10	0.007	0.027	0.034
19.	Training in making Bamboo articles.	-	-	-	-	-	-	-	-	-	-	-	-	10	0.006	0.023	0.029	10	0.006	0.023	0.029
20.	Training of tribal youth in MRC farm in nursery management, production of grafts, bunding, and layering for 3 months	-	-	-	-	-	-	-	-	-	-	-	-	14	0.003	0.014	0.017	14	0.003	0.014	0.017
21.	Field Trips	3000	0.02	0.10	0.12	-	-	-	-	-	-	-	-	120	0.002	0.003	0.010	3120	0.022	0.103	0.130
Grand Total:-			0.58	2.33	2.96		0.432	1.926	2.408		0.722	2.846	3.568		0.176	0.697	0.873		1.96	7.849	9.809

Sl. No.	Name of Training	Scope of training	Duration of training.	Programme content	Participants	Financial Implication	IFAD Sa.	State Sb.	Total Sc.
1	2	3	4	5	6	7	8	8	8
1.	Horticulture	To improve skills on raising of nurseries, seedlings, grafting of mango, cashew and sapota and to make the tribal trainees self-equipped with technics for raising nurseries, seedlings and making grafts.	15 days	<ol style="list-style-type: none"> 1. Raising of seedbed nurseries 2. Raising of seedlings of (1)Coconut, (2)Custard apple (3)Jack (4)Tamarind (5)Accassia (6) Papaya (7)Soapnuts etc., 3. Making high value plant material like mango grafts, sapota graft & cashew graft. 4. For making layers of pomegranate, gauva 5. Budding on roses and bar 	Tribal Youths who involved in rehabilitation of Podu Programme will be trained each batch 10 persons, 12 training programmes in a year. 1200 trainees in 10 years.	Each trainee will be paid a stipend of Rs.225/- 15 days duration	2.160	0.540	2.700
2.	Agriculture	To increase agriculture productivity in a unit area while adopting dry farming practices application of fertiliser and prospect control of pests and diseases.	10 Days	<ol style="list-style-type: none"> 1. Dry-land farming practices 2. Soil-conservation 3. Adopting of improved seed 4. Usage of chemical fertilisers 5. Usage of pesticides 6. Spraying operations 7. Repairs and upkeep of P.P. equipment 8. Water management practicing 9. Management practices on paddy, ragi, bajra, redgram, pubea, oil seeds and vegetables. 	Tribal farmers who involved in the project will be trained. 15 tribal farmers imposed training in each batch 12 training camps in a year. 1800 tribal farmers will be trained in 10 years.	each trainee will be paid a Stipend of Rs.150/- 15 days period.	2.160	0.540	2.700
3.	Field trips	To enhance the skill and knowledge of the tribal farmers in agriculture production.	2 days	<ol style="list-style-type: none"> 1. Taking the tribal farmer on field trip to Agri. Research Station of A.P.A.U., Anudalavalasa, Rajolu, Vizianagaram, Anakapalli and Chintapalli. 2. To equip better knowledge on mesta-paddy, millet, sugarcane and oilseed grafts. 	<p>Tribal farmer involved in the project area will be taken to tour for 2 days.</p> <p>2. Each trip 60 farmers will be taken on bus 300 farmers in a year, taken 3000 farmers each 10 years.</p>	To and fro bus charges & D.A. will be paid to each trainee	0.960	0.240	1.200
4.	Training	Refresher course training to the staff to improve their technical knowledge and also improve the Staff. grafting and laying technics.	15 days	<ol style="list-style-type: none"> 1. To improve technical knowledge on latest development 2. To know and improve skill on grafting and laying. 	<p>The persons working at H.N.T.O.Farm, Seethapet</p> <p>Mallis - 5 Sub.Asst. - 1 H.O. - 1 P.H.O. - 1</p> <p>Total - 8</p>	The staff will be paid T.A. & D.A. and Stipend for 15 days.	0.480	0.120	0.600
5.	Training & Monitoring and evaluation.	Monitoring and evaluation is an important item of work in implementation of the Project To monitor and evolve the scheme effectively.	15 Days	<ol style="list-style-type: none"> 1. To know how to monitor and evaluate the programme in the project area. 	<p>Officer working in the Project area</p> <p>1. P.A.O. 2. P.H.O. 3. Dy.S.O. 4. M.D.O. 5. P.O.</p>	The officers will be paid T.A., D.A. & stipend for 15 days.	0.080	0.020	0.100

FINANCIAL IMPLICATIONS OF PROJECT MANAGEMENT

(Rs. in Millions)

Sl.No.	Name of the Post	Scale of pay	No. of posts	Amount required	
				Per annum	For 10 years (project period)
STATE LEVEL:					
Recurring:					
			Existing		
1.	Ex.Officio Director (D.F.W.)	--			0.5520
2.	Project Liaison Officer (in the cadre of J.D. ICRATI.)	2410-90-2950-100-4050	1	0.0552	--
3.	Ex.Officio Technical Officer (J.D. Horticulture)	--	Existing	--	--
4.	Dy. Director (Poda rehabilitation)	--	Existing	--	0.4740
5.	Dy. Director (Monitoring) (ICRATI, Regal. Centre Paderu)	1930-80-2780-90-3500	1	0.0474	0.8760
6.	Research Officers	1810-70-2510-80-3230	2	0.0876	1.3680
7.	Monitoring Assistants	1330-60-1930-70-2360	4	0.1368	0.4680
8.	Typists	910-30-1240-35-1625	2	0.0468	0.8400
9.	Attenders	740-15-950-20-1150	5	0.0840	
DISTRICT LEVEL:					
1.	Ex.Officio Project Director (P.O. ITDAs)	--	Existing	--	1.8480
2.	Asst. Director (Horticulture)	1930-80-2780-90-3500	4	0.1348	0.8160
3.	Monitoring Officer	1810-70-2510-80-3230	2	0.0816	1.4160
4.	Horticulture Officer	1330-60-1930-70-2360	4	0.1416	1.3200
5.	Monitoring Assts.	1330-60-1930-70-2630	4	0.1320	0.4680
6.	Typist	910-30-1240-35-1625 spl.75	1	0.0468	0.4920
7.	Attenders	740-15-950-20-1150	3	0.0492	
FIELD LEVEL:					
1.	Field Assts. (sub assistants)	910-30-1240-35-1625	237	5.1192	51.1920
			270	6.2130	62.1300

NON RECURRING**State level:**

	Amount required
1. Jeep	0.1250
2. Electronic typewriter	0.0100
3. Copier machine	0.1500
4. Furniture	0.1000
5. Telephone	0.0050

DISTRICT LEVEL:

1. Jeep	0.1250
2. Furniture	0.0500
Total:	0.5650

ABSTRACT

1. Recurring	Rs. 62.1300 Millions
2. Non-Recurring	Rs. 0.5650 "
Total:	62.6950 Millions

Sl.No.	Sector	Seethampet			Parvathipuram			Paderu			Rampachodavaram			Total requirements		
		IFAD	STATE	Total	IFAD	State	Total	IFAD	State	Total	IFAD	State	Total	IFAD	State	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Proposed schemes for the development of Land under Shifting cultivation.	36.22	9.06	45.28	51.43	12.85	64.28	65.42	16.36	81.78	52.85	13.21	66.06	205.92	51.48	257.40
	Sub-total	36.22	9.06	45.28	51.43	12.85	64.28	65.42	16.36	81.78	52.85	13.21	66.06	205.92	51.48	257.40
2.	Improvement of Land under Valleys:															
a.	Seed Exchange	0.064	0.01	0.07	0.37	0.09	0.46	0.28	0.07	0.35	0.44	0.11	0.55	1.15	0.28 1.15	0.128 1.43
b.	Irrigation	1.13	4.54	5.67	1.72	6.88	8.60	2.35	9.41	11.76	1.91	7.64	9.55	7.11	28.47	35.58
c.	Systematic Land Development	5.90	1.48	7.38	2.50	0.62	3.12	13.91	3.48	17.39	0.76	0.19	0.95	23.07	5.77	28.84
	Sub-total:	7.09	6.03	13.12	4.59	7.59	12.18	16.54	12.96	29.50	3.11	7.94	11.05	31.33	34.52	65.85
3.	Soil conservation	6.34	1.58	7.92	16.17	4.03	20.20	3.63	0.91	4.54	3.69	0.94	4.63	29.83	7.46	37.29
4.	Community Services	8.71	34.86	43.57	48.22	192.85	241.07	11.61	46.45	58.06	13.69	54.81	68.50	82.23	328.97	411.20
5.	Training programmes	0.58	2.38	2.96	0.48	1.93	2.41	0.72	2.85	3.57	0.17	0.70	0.87	1.96	7.85	9.81
6.	Marketing facilities	4.56	1.14	5.70	9.19	2.30	11.49	13.26	3.31	16.57	1.37	0.34	1.71	23.38	7.09	30.47
7.	Updating of Land Records	0.02	0.08	0.10	--	--	--	--	--	--	0.91	3.66	4.57	0.93	3.74	4.67
	Grand Total:	63.52	55.12	118.65	130.08	221.55	351.63	111.18	82.84	194.02	75.79	81.60	157.39	380.58	441.11 62.70	821.69 62.70
	PROJECT MANAGEMENT:													380.58	503.81	884.53

EMPLOYMENT GENERATION

Rs.: Millions
Million man days

S.No.	I.T.D.A.	Irrigation facilities															
		Plantation prog- rammes/turseries		Check dams		Tanks		C.I. Wells		L.I. schemes		paddy		Seed exchange		Land developm	
		Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment
		4	5	6	7	8	9	10	11	12	13	14	15	16	17		
1.	Seethampeta	45.28	3.02	1.95	0.04	5.027	0.014	--	2.90	0.06	0.550	0.018	0.073	0.002	7.376	0.492	
2.	Parvathipuram	64.28	4.29	2.78	0.06	0.24	0.013	2.55 1.43	3.00	0.06	0.233	0.008	0.456	0.015	3.124	0.208	
3.	Paderu	81.78	5.45	6.62	0.13	0.46	0.024	3.00	0.08	0.242	0.008	0.349	0.012	17.390	1.160		
4.	Rampachodavaram	66.06	4.40	9.50	0.19	--	--	--	--	0.053	0.002	0.549	0.018	0.950	0.063		
	Total:	257.40	17.16	20.85	0.42	0.97	0.05	3.78	0.20	1.078	0.036	1.427	0.047	28.840	1.923		

contd..

Community services

S.No.	I.T.D.A.	Community services																	
		Soil conser- vation		Training programmes		Roads		Buildings		Civic amenities		Housing		Public distri- bution system		Health			
		Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment	Invest ment	Employ ment		
		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1.	Seethampeta	7.92	0.528	2.270	1.36	8.80	0.410	2.37	0.063	--	--	16.80	0.448	3.00	0.040	2.00	0.013	3.000	0.040
2.	Parvathipuram	20.20	1.347	1.03	0.62	124.39	5.805	30.89	0.824	1.23	0.033	7.30	0.195	5.50	0.073	9.58	0.064	18.96	0.25
3.	Paderu	4.50	0.300	2.332	1.34	15.11	0.705	--	--	--	--	32.30	0.861	--	--	2.93	0.020	--	--
4.	Rampachodavaram	4.63	0.308	0.413	0.25	13.90	0.649	12.04	0.321	0.30	0.008	14.04	0.374	0.47	0.006	15.5	0.103	0.96	0.012
	Total:	37.24	2.483	5.945	3.57	162.20	7.569	45.30	1.208	1.53	0.041	70.44	1.878	8.97	0.119	30.1	0.200	22.92	0.205

contd...

3.10. I.T.D.A.	Marketing									
	Drinking Water	Processing units		Warehousing and Marketing		Tribal self employment		Extension Education		
	Invest ment	Employ ment	invest ment	employ ment	invest ment	employ ment	invest ment	employ ment	invest ment	employ ment
36	37	38	39	40	41	42	43	44	45	
1. Seethampeta	0.12	0.001	2.20	0.88	2.80	0.075	0.40	0.03	0.20	0.001
2. Parvathipuram	5.62	0.037	3.00	1.20	5.10	0.136	1.50	0.10	1.50	0.01
3. Paduru			5.43	2.17	3.70	0.098	6.21	0.41	0.76	0.005
4. Rampachodavaram			1.14	0.46	0.40	0.011	0.10	0.01	0.02	0.0001
Total:	5.74	0.0381	11.77	4.71	12.00	0.320	8.21	0.55	2.48	0.0161

Tribal Cultural Research & Training Institute

Tribal Welfare Department,
Telugu Sankshema Bhavan,
Masab Tank,
Hyderabad-500 028.
Phone : 221270