Process Evaluation of Andhra Pradesh Tribal Development Project

Dr. V.N.V.K. Sastry
K.V.S. Sastry

TCR&TI

TRIBAL CULTURAL RESEARCH AND TRAINING INSTITUTE
Hyderabad

PROCESS EVALUATION OF ANDHRA PRADESH TRIBAL DEVELOPMENT PROJECT

Dr.V.N.V.K. SASTRY

K.V.S. SASTRY

TRIBAL CULTURAL RESEARCH AND TRAINING INSTITUTE

TRIBAL WELFARE DEPARTMENT

GOVERNMENT OF ANDHRA PRADESH

HYDERABAD

AUGUST, 1993

RESEARCH TEAM

1.	Dr. V.N.V.K. Sastry	Deputy Director (Planning) and Research Project Coordinator.
2.	Sri. M. Narayana Rao	Deputy Director (Horticulture)
3.	Sri. K.V.S. Sastry	Deputy Director (Monitoring and Evaluation)
4.	Sri. K.V. Subba Reddy	Research Officer
5.	Sri K. Chandra Raju	Research Investigator
6.	Sri Ch. S. Ranganadham	Statistical Assistant
7.	Sri Imtiaz Ahmed	Research Investigator
8.	Sri Ch. Satya Murthy	Assistant Executive Engineer
9.	Sri V. Linga Raju	Assistant Executive Engineer
10.	Sri K.M. Ahmed	Assistant Executive Engineer

PREFACE

The quintessence of the oriental and Western thought is perhaps best reflected in the writings of Rudyard Kipling. In "The serving-men" he says:

"I keep six honest serving-men

(They taught me all I knew):

Their names are what and why and when

And how and where and who".

Evaluation is essentially the adroit use of all these serving-men. Here I wish to hasten to add that the present work can more appropriately be called "Introspection" for several reasons; primarily because it has been carried out by men who are actively associated with the implementation of the project. This Project, it has to be noted is an integral part of the massive overall effort of Tribal Development in Andhra Pradesh, but restricted to 16 watersheds and 2,077 villages and 63,000 Scheduled Tribe families in 4 out of the 9 I.T.D.As in the State. Focus on environmental upgradation and ensuring food security is its speciality. Another distinguishing feature is that Project preparation, Appraisal and Supervision is shared by Government of India, Government of Andhra Pradesh, IFAD, UNDP/OPS and its implementation is combinedly by the participants and the administrative delivery system which is yet another innovative feature. A very significant feature of this project (A.P.T.D.P.) is introduction of participatory management. Though it is in nascent stage, this spark is very much visible and it is hoped that it would spread in all other areas and in all the developmental activities. The Project costs are also shared; Rs.493.33 millions by IFAD and Government of Netherlands 63.40% and Government of India, Government of Andhra Pradesh. Girijan Co-operative Corporation, Commercial Banks and Scheduled Tribes Finance Corporation (TRICOR) Rs.285.41 millions 36.6% totalling to Rs.779.74 millions. The experience has been pleasant and rewarding.

Process evaluation is basically an exercise in observation of the present trends with recent past as the backdrop. I am happy that this report fills the bill as it is a candid self appraisal. While there are events of success, there are also instances of deficiencies; the situation is as it must be because socio-economic change process in a

way implies these, neither success must lead us to euphoria nor omissions to dispair. The candour in presentation which runs through the report, which will be noted by the reader was imparted by Smt. Chaya Ratan, I.A.S., Commissioner of Tribal Welfare, Andhra Pradesh, who at every stage encouraged the team of officers to put things in correct perspective, abjuring from any kind of bias and to see things without any blinkers on.

Trusting that this report will serve its purpose, I leave it to the reader to judge its value.

Dr. K. Mohan Rao
Director,
Tribal Cultural Research & Training Institute,
Samkshema Bhavan,
Andhra Pradesh (India)
HYDERABAD - 500 028.

CONTENTS

CHAPTER		Page
	Preface	i
I.	INTRODUCTION	1
	– Objectives of the Project	1
	– Approach and Project Components	2
	– Area and people	3
	– Pattern of Project Financing	3
	– Genesis of the Study	3
II.	STUDY DESIGN	5
	– Aims and Objectives of the Study	6
	– Method of Study	6
	– Scope of the Study	7
	– Reference and Survey Period	8
	– Selection of study villages and organisation of survey	8
III.	START-UP PROCESSES	11
	– Agreements and Statutory Processes	11
	– Project launching	11
	– Target area and village identification process	12
	– Awareness Raising Process and Motivation Meetings (Grama Sabha)	13
IV.	CONSERVATION AND CONSTRUCTION ACTIVITIES (on-farm civil works).	18
	– Soil Conservation	19
	– Small Scale Irrigation	26
V.	ECONOMIC DEVELOPMENT AND EXTENSION ACTIVITIES: (Horticulture and Arable Crop Development)	34
	– H.N.T.C. Support	35
	– Farmers' Satellite Nurseries	38
	– Plantation Programme	43
	– Arable crop Development	49
	– Farmers' Seed Production Sites	50

CHAPTER		Page
VI.	COMMUNITY PARTICIPATION AND WOMEN DEVELOPMENT	53
	– Women Societies or Mahila Sangams or Mandalis	53
	– Thrift Societies and Grain Banks	55
VII.	SUMMARY OF FINDINGS AND RECOMMENDATIONS	69
	TABLES	
1.	Details of Sample Coverage	10
2.	Coverage details of Grama Sabha as start up processes indications	14
3.	Evaluation indications of village liaison workers selection process, experience and performance.	16
4.	Process Evaluation indications of soil/water conservation programme	19
5.	Process Evaluation indications of small scale irrigation programme	28
6.	Process Evaluation indications of farmers' satellite nursery programme	39
7.	Key indications of process evaluation of horticulture programme	44
8.	Process evaluation indications of community/women participation programme	59
9.	Percentage distribution of utilisation of loan amount	60
	ANNEXURES	
I	List of villages visited by the evaluation team	78
II	Physical targets and achievements under soil conservation programme	80
III	Physical targets and achievements under small scale irrigation programme	81
IV	Physical targets and achievements under horticulture and arable crop development programme	82
V	Major processes for the implementation of farmers' satellite nursery programme.	83
VI	Community Development - Thrift and Credit Societies	85

CHAPTER-I

INTRODUCTION

The Andhra Pradesh Tribal Development Project (APTDP) with a total outlay of 779.74 million rupees commenced from the year 1991-92. The Project period is seven years and the project area lies within Integrated Tribal Development Agency Areas in Srikakulam, Vizianagaram, Visakhapatnam and East Godavari districts.

The main target group of the project is Tribal families pursuing shifting cultivation as important or major occupation and collection and sale of minor forest produce as important subsidiary occupation. Dry land cultivation on gentle slopes and wet cultivation on terraces or hill slopes by diverting hill streams with the help of traditional check dams is also pursued by sizeable tribal population. Food security is the major problem in these areas as the vast natural resources especially water for irrigation remained un-exploited and the human resources development has to be initiated to equip the tribals with the necessary awareness and skills to upgrade their technology for improving their economic living standards. The tribals also need to participate in new activities to avail the new benefits of development and also to protect themselves from exploitation and ultimately to become self-reliant. With this background in view, the Andhra Pradesh Tribal Development Project was started with the following objectives[1] (as defined in Annual work and finance plan 1993-94)

Objectives of the Project:

The main objectives of the project are:

1. **To improve the household food security by promoting activities which:-**

(a) generate sustainable increase in production and productivity from rainfed and irrigated lands leading to increase in farm incomes, ensure optimal utilisation and maintenance of their resources and assets.

(b) reduce and reverse the degradation of environm lent.

2. **To promote sustainable self reliance amongst the participant group by adopting activities which:**

(a) encourage increased village self-reliance for food production and use of local resources in a sustainable way;

---

1. The objectives of the Project are reframed in March, '93, to suit the refined approaches and processes envisaged by the Project Management in implementation of the Project as the objectives envisaged in Appraisal Report and Loan Agreement are not so explicit, but conveyed the same philosophy in an implicit manner.

(b) focus on generating awareness on education, health and nutrition, and participation by women in particular in productive sector encompassing savings, grain banks and other economic activities.

(c) enlist active participatory involvement in planning and building up of community assets and common property resources;

(d) foster community management systems for better maintenance and utilisation of local resources and community assets like drinking water bores, Irrigation sources, schools, Anganwadi centres etc.

Approach & Project Components:

In tune with the aims and objectives of the project, water shed based participatory micro-level planning, execution and management is the approach adopted for integrating the ecological security (Macro level) house hold food security (Micro level) and human resource development (Macro-Micro levels) facets of the programme.

a) **Natural Resource Development:** Comprising of soil/water conservation; small scale irrigation, horticulture and arable crop development; and extension, technical training and assistance.

b) **Community and Women's Development:** Aims at awareness generation among the tribal people about health, nutrition, literacy, marketing, credit, modern technology for inculcating self reliance and self sustenance. Establishment of grain banks, thrift and credit societies; operation of village development funds, formation of tribal community groups are the important instruments under this component.

c) **Health & Education:** Aims at improving the human capital and social consumption standards.

d) **Marketing and Credit Support:** Aims at (i) equipping and motivating the tribals to take up marketing of their produce by organising visits to producers'/ farmers' marketing cooperatives running successfully in various parts of the country, by organising such cooperatives, and by creating necessary infrastructure at the nearest major marketing centres (ii) strengthening the existing institutional support by providing share capital to Girijan Cooperative Corporation and also to facilitate better market intelligence.

e) **Project Management Support:** To assess training needs and to provide necessary technical assistance for operational effectiveness of implementation of the project. The important ingredients are strengthening of the management staff and establishment of M & E system.

Area and people:

The target group of A.P.T.D.P. consists of 63,370 families living in 16 identified watersheds in the four I.T.D.A. areas as follows:

S.No.	Seetham-peta	Parvathi-puram	Paderu	Rampacho-davaram	Total
1. No.of Water sheds	4	6	3	3	16
2. No.of villages	86	147	1,728	116	2,077
3. No.of project families	9,050	7,252	41,528	5,540	63,370

Almost all the population living in the project villages are tribals and 70% of them are engaged in the Podu Cultivation and collection and sale of Minor Forest Produce. Major tribal groups living in the project area are Savara, Jatapu, Porja, Kondadora, Gadaba, Bagata, Konda Reddys and Valmikis.

Pattern of Project Financing:

The source of funding wise breakup of total outlay of Rs.779.74 million is as follows:

	(Rs. in Millions)
a) IFAD, Rome/Government of Netherlands (co-finance)	459.64
b) Government of India/Government of Andhra Pradesh	110.92
c) Commercial Banks / Girijan Cooperative Corporation/Tribal Co-operative Finance and Development Corporation	174.49
d) Un allocated category	34.69
Total Project Outlay	779.74

Health and Education components are yet to be cleared. Similarly the co-financing from Govt. of Netharlands is reported to be under process.

Genesis of the Study:

Since inception, intune with the project philosophy and rationale, monitoring and evaluation aspects are symbiotically linked with the planning and execution of various programmes. As an aid to the project managements for systematically implementing the programmes, for every scheme Programme Appraisal and Task Sequencing diagram are prepared delineating various processes involved. Similarly calendar of operations for each month is evolved. The progress and process of execution are reviewed periodically.

Coming to evaluation aspect, besides the Start up Mission team which visited the project areas in October, '91, two Supervisory Missions assessed the pace of project and processes involved. The Missions appreciated the endeavours of project authorities and functionaries as well as achievements. The Mission also suggested various measures for consolidation of achievements. One of the recommendations of the Mission is launching of process evaluation study to be undertaken by Tribal Cultural Research and Training Institute. The project co-ordination authority also felt the need for documentation of various achievements, and also study of constraints to provide a feed back to the tribal participants and feed forward mechanism to functionaries for correcting and concretisation of various processes under operation.

With the experiences and achievements of A.P.T.D.P., the Government of Andhra Pradesh put forth a proposal to I.F.A.D., for extension of the project to other five I.T.D.As in the state. Responding favourably to the proposal, I.F.A.D. requested the Government of Andhra Pradesh to launch a quick evaluation study of A.P.T.D.P. to refine appropriately and embed the processes in the preparation report of A.P.T.D.A. (Phase-II). Accordingly the Commissioner, Tribal Welfare and Project Coordinator of A.P.T.D.P. requested the Tribal Cultural Research and Training Institute (TCR&TI), Hyderabad to conduct a quick and critical evaluation of the processes/involved in the on-going Project "so that experiences and lessons from the project implementation can be utilized for mid-course corrections and also build in these experiences into the design of the second phase of the A.P. Tribal Development Project proposed for the remaining five I.T.D.A. areas of the state". A team of experts was constituted accordingly by Director, T.C.R. & T.I., from among the Research Staff of the Institute and others associated with Tribal Welfare activities. The team consists of Anthropologist / Socialogist, Statisticians, Economists, Civil & Design Engineers and Horticulture and Agriculture technologists. All the team members possess varied experience of planing programmes, implementation, monitoring and evaluations.

CHAPTER-II

STUDY DESIGN

It is a well construed fact that most of the literature on evaluation consists of mainly impact and terminal evaluation studies[2]. Although few studies (in Indian context) titled as "Concurrent" or "Process" evaluation, the contents portray a mix of progress monitoring and select impact indications interspersed with few descriptions on either macro or obvious micro processes[3]. Besides, many studies adopted a customary survey method by drawing random samples from a list of target villages or beneficiaries, while a few studies followed other extremity by selecting very few villages and drawing conclusions exclusively on the basis of spot evidence without going into processes and project set up.

A humble attempt is made in this study to evolve a frame work for undertaking process evaluation, starting with assumptions of project design, processes envisaged, operationalised under field conditions etc[4].

As soon as the team was constituted in the 1st week of June '93, a thorough study of the literature was initiated. The important documents studied include Appraisal Report on A.P.T.D.P., Working Papers, Annual work and Finance Plans of 91-92, 92-93 and 93-94 and guidelines issued by Commissioner, Tribal Welfare on various programmes. The added advantage for the team members is that they have been visiting these areas for various studies taken up by T.C.R. & T.I., or as part of their administrative and supervision duties. This has provided a general as well as good knowledge of the on-going programmes under A.P.T.D.P. and processes involved which served as a background for quick appreciation of the programme and processes involved. Such association also ensured avoidance of "quick and dirty" biases[5].

---

2. For a sample, refer Andhra Pradesh Economic Association, SIXTH ANNUAL CONFERENCE PAPERS- EVALUATION OF WELFARE PROGRAMMES IN ANDHRA PRADESH, JANUARRY, 1988.
3. See for instance, Department of Rural Development, Ministry of Agricultural, Govt. of India, CONCURRENT EVALUATION OF I.R.D.P., June, 1990, New Delhi.
4. We have adopted the guide lines in the joint study sponsored by World Bank, I.F.A.D., F.A.O.; by Dennies J. Casely and Krishna Kumar, THE COLLECTION, ANALASIS AND USE OF MONITORING AND EVALUATION DATA; (The Johns Hopkins University Press, Baltimore and LONDON) 1988.
5. Robert Chambers cautions quick surveyors about these traps and biases while advocating need for RRA in his paper; SHORT CUT METHODS IN SOCIAL INFORMATION GATHERING FOR RURAL DEVELOPMENT PROJECTS, revised version of paper originally appeared in, Michael M. Cernea, ed. PUTTING PEOPLE FIRST: SOCIOLOGICAL VARIABLES IN RURAL DEVELOPMENT, Oxford University Press, World Bank, 1985.

Aims & Objectives of the Study:

The aims of the study are:

i) to assess the modus operandi of various processes delineated by the project co-ordination and management units for implementation.

ii) to appraise the out comes and effects of programme & process inputs in order to arrive at possible impact of project interventions.

iii) to evolve whenever required mid course corrections to serve as feed forward mechanism.

The following working objectives have been set out for the study:

a) to know whether the Annual Work and Finance plan are in consonance with the perspective or not;

b) to know whether the Annual Work and Finance Plan targets have been achieved or not within the time frame.

c) to know whether people's participation has been ensured or not at every stage i.e., planning, implementation and maintenance of the resources generated or assets created under various programmes.

d) to know whether integrated approach envisaged in the project is followed or not;

e) to know whether the women's participation is ensured or not;

f) to know whether the quality, quantity and timeliness of the programme is ensured or not;

g) to assess the increase in productivity in the fields where the programme has been implemented;

h) to discuss with the tribal participants and officials on the problems of implementation of the schemes and obtain suggestions for improvement.

Method of study:

For a quick evaluation of this sort, a research method different from normal research methods has to be followed. Existing survey methods are time taking while the P.R.A. type studies, which no doubt yield quick results, do not help in having an "in-depth" analysis or cause aggregation predicament for generalisation. Therefore, the following research method already tested successfully in the quick evaluation of the loaning programme by the T.C.R. & T.I. During (1990-92) has been

adopted[6] after refining it further to suit the multiple objectives and process evaluation frame work. In a nut shell it has four components namely.

i) Conducting group discussion with the help of a 'check list' and

ii) Collecting detailed case studies of some of the programmes and participants.

iii) Spot verification method for key items/schemes for quality assessment.

iv) Discussions with concerned Project Directors, field level staff connected with implementation.

In the group discussion method, one participant is either supported or corrected by other creating a chain of dialogues facilitating necessary triangulations to reveal the actual position while the case studies yield diagnostic dimensions of grand success or failure and associated intricacies. They together help in arriving at correct and detailed picture as well as peoples perceptions. In consonance with the objective of the study partially structured check lists for (1) Small Scale Irrigation works and (2) for other schemes are prepared. Discussions with project implementators revealed various problems and constraints in implementation of schemes as per time schedule.

SCOPE OF THE STUDY:

Keeping inview the time constraint and remotness of project areas, as well as the fact that a wealth of information is available from the review Reports of Project Progress and Technical Officers monitoring notes, Supervisory Mission's observations, the scope of the Survey is restricted to the following key programmes. Awareness raising, motivation, participant involvement training and input delivery are the processes the study focussed at to appraise the concomitant out comes, effects and their quality.

- Soil Conservation
- Small Scale Irrigation
- Horticulture Plantation
- H.N.T.C.
- Farmers Satellite Nursery
- Farmer's Seed Production Sites
- Women Societies (Mahila Mandalis)
- Thrift Clubs and Grain Banks.

6. Please refer Mohana Rao, K., Sastry, V.N.V.K. et. al; EVALUATION OF CONSUMPTION CREDIT AND SEASONAL AGRICULTURAL OPERATIONS IN SCHEDULED AREAS OF THE STATE OF ANDHRA PRADESH., T.C.R. & T.I., Govt. of Andhra Pradesh, Hyderabad, India, 1990-91.

The credit and Minor Forest Produdce procurement programmes executed by G.C.C. are left out from the scope of the study for the reason that at the instance of G.C.C., the Tribal Cultural Research & Training Institute has already conducted two evaluations during the last two years. However, incidential observations, covering G.C.C. credit programme and Adaptive Research are also included in the report. Similarly, although included in the checklist originally, the live stock improvement programme is also removed from the purview of the study as the programme has been initiated only at Parvathipuram recently.

The Commissioner, Tribal Welfare and Proect Co-ordinator, A.P.T.D.P. also desired that "a critical study be made on all aspects of the programmes and the report should speak out facts without mincing words" so that this evalution helps really in taking immediate and corrective measures wherever required.

Reference and survey period:

The process evaluation survey was conducted during 15-27, June, '93 with a reference period for selection of villages etc as approved in A.W.F.Ps and reported to be covered by project management units of four I.T.D.As.

Selection of Study Villages & Organisation of Survey:

Broadly the design adopted is a multiphase stratified cluster sampling. Each I.T.D.A. is taken as a basic stratum. The project villages covered during 1991-92 and 1992-93 are geographically stratified into three sectors on the basis of watersheds, mandals or approach routes. In the next stage key villages with clusters of programmes or key programme village with clusters of villages representing other programmes (Paderu) are delineated by mapping the schemes or activities in each sector. The key sample villages are finally selected purposively imposing four criteria. They are - (i) fairly interior and remote (ii) not exposed to Supervision Mission Team visits (iii) representing the ethnic composition of tribals living there and (iv) broadly cover the two years of implementation. The above design was felt necessary to ensure coverage of different types of schemes that are being implemented. For instance, horticulture and agriculture programmes are expected to be found in each village while soil conservations is to be limited to podu prevalent habitats. Satellite Nursery Programmes are to be implemented in few villages covering areas to be planted in a number of villages where as seed production sites range is much higher and mostly depends upon crops chosen for that purpose. Water harvesting structures under small scale irrigation programme are often away from the village sites but cover lands of groups of villages.

All together 46 Key villages and 22 subsidiary villages were selected for the purpose of the study. The coverage details are presented in the following table. (1) while the list of villages are given in Annexure-I.

The study team on reaching the I.T.D.A. Head-quarters, was divided into three sub-teams and it was ensured that each team is headed by a senior and experienced officer (a Deputy Director) and supported by a research scholar from T.C.R. & T.I. and an engineer from Chief Engineer's Office. Besides, one or two sectoral officers from the I.T.D.A. also accompanied each team as facilitators.

In order that the study is made in detail, only two villages per day i.e., one in the forenoon and the other in the afternoon, were studied by each sub-team. In each village, after the group discussions are over, the specialists visited the fields where the programme is being implemented viz., Horticulture, Check dams, Soil Conservation, other constructions etc, to physically verify whether the processes envisaged are followed or not. On the way to the villages or during the return journey from the villages, certain time was taken to visit other programmes not found in the study villages but still relevant to the development activities in the study villages viz., satellite nursery, seed production centre etc. Separate discussions were held with women in each village.

At the end of tour in each A.P.T.D.P. (I.T.D.A.) area, detailed discussions were held with the project officer concerned in the presence of all the staff of I.T.D.A. dealing with A.P.T.D.P. programmes to give them a feed-back and also to help in taking some immediate corrective measures so that the working 'season' is not lost.

TABLE : 1 - DETAILS OF SAMPLE COVERAGE

I.T.D.A.	No. of M.W.S.			No. of Key Villages			No. of House Holds in Key Villages			No. of Villages in which schemes were covered by the study teams								
	Sample	Plan 91-93	%	Sample	Plan 91-93	%	Sample	Plan 91-93	%	SC	SSI	H.P.	S.N.	SPS	DP	Thrift (Women)	Thrift (Men)	G.B.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
S' Peta	3	11	27	6	24	25	148	1594	9	4	6	7	2	1	0	9	0	1
P'Puram	4	6	66	9	71	13	398	4730	8	7	5	8	7	6	0	7	0	0
Paderu	10	32	31	19	542	4	693	15035	5	15	9	14	5	9	11	3	0	0
R.C. Varam	9	10	90	12	72	17	980	5190	19	11	6	7	1	5	2	10	4	4
TOTAL	26	59	44	46	709	6	2219	26549	8	37	26	36	15	21	13	29	4	5

MWS = Micro Water Shed
SC = Soil Water Conservation
SSI = Small Scale Irrigation
H.P. = Horiculture Plantation
S.N. = Satellite Nurseries
SPS = Seed Production Sites
DP = Demonstration Plots
G.B. = Grain Bank

START-UP PROCESSES
(Project Initialisation)

Evaluation of start up processes indicate early trend signals. Technically, the 1st November, 1991 may be construed as the date of the commencement of the project, since the startup workshop was held during the last week of October, 1991; but statutorily it is to be taken as 15th May, 1991, the date on which the loan agreement was signed, with retro-active financing facility from October, 1990. The "Zero Year" for the project can thus indirectly be arrived at, during which the project initialisation takes place. The "Zero Year" for each of the programmes, and villages however is different and varies. The Apprisal Report classified the project programmes broadly in to three groups - Conservation and Construction activities (on-farm civil works), Economic activities which include Horticulture, Extension and Training and Social and Community Development activities. Each of these activities have a "Zero Year" and involved start up processess, which will be dealt in subsequent chapters. Time phasing and operational integration of these activities is the main task of the management. In this chapter, we deal with how the start up processess for overall project initialisation has taken shape.

Agreements & Statutory processes:

During the period, from October, 1990 to May, '91, the necessary negotiations, fulfilling initial covenants for loan agreement are carried out by the project agencies and Government. It may be pointed out that, the co-finance from Netherlands Government and additional Co-finance for taking up education and health components and a major part of communty development activities is yet to materialise.

Project Launching:

This has three main activities- (i) Recruitment of project staff and redeployment of existing staff, (ii) identification of infrastructure needs both for programmes and management and (iii) delineating the programme processes and orientation training to project staff to introduce project philosophy and sensitise them. Although there are time over runs, by and large these activities took place as envisaged, excepting in the case of recruitment of women community development co-ordinator (WCDC). The Project Management tried to utilise the services of existing extension officers and I.C.D.S. project staff in the absence of W.C.D.C. But it seems to have not worked satisfactorily as can be seen from the fact that women development activities by and large excepting Parvathipuram picked up momentum with discernible outcomes only after the recruitment of W.C.D.C. The orientation trainings also seem to have limited impact, as most of the staff trained were transferred and some of the staff still suffer

from the hangover of previous procedures. Specific instances can be seen in the following chapters. Agricultural consultant, (AC) a modified innovation of the project for undertaking extension activities, turned out to be the best project intervention, as can be seen from the fact that project officers are putting up demands for recruitment of various types of "Consultants" analogous to ACs. Sustainability of this intervention is in question, since there is a significant turnover of ACs, also as they are not sure of their career after completion of the project. It is hoped that the institutionalisation of village liason workers and intensification of activities (see later part of the chapter and other chapters for details) may provide an answer to this problem in the long run.

Target Area and village identification Process:

In the appraisal report (P17), it was mentioned that the target group would comprise of all families (tribal) in the 16 water sheds. However, during discussions with officials, it was revealed that all the villages/families in the water sheds have not been included because the programme chalked out by them for total coverage had to be reduced to limit to assistance indications given for the project. The result is that some villages have been totally leftout, while some areas and families even within the finally selected villages have also been not covered. The programme turned into a immediate need based assistance, especially with reference to soil conservtion, small scale irrigation and credit.

The officials are of the opinion that these villages or families or areas can not be covered now as this is the third year of programme and that they can not go back to left out villages or areas. Because of paucity of time, the team could not go into details of this problem. Therefore, it is necessary that all such villages areas and families left out have to be identified and action taken to cover them as backlog by providing necesssary funds.

Secondly, even the process of selection of villages for first year and second year does not seem to have been done by following the same principle. The first year villages have been selected mostly on "ridge to valley" principle within each micro water shed while the second year villages according to officers, have been selected "wherever there is good response" and immediate need for soil conservation. This may partially affect the anticipated out come of watershed based approach. Besides funds, constraint, the availability of sufficient staff to provide technical guidance in soil conservation measures is found to be the other reason. The special soil conservation sub-divisions created under the project and started operating in 1993 may bring in desired out-comes to a greater extent in future. Further, to delineate the vulnerable micro water sheds and villages on scientific and holistic lines, the project authorities are planning to utilise various types of maps generated from satellite imagery processing. The need assessment for taking up the left out areas is expected to follow.

"Zero Year Dilemma:

Each of the village selected for implementation of the programme has a "Zero Year" when the processes like identification of problems and programme, in preparing the population for community organisation, training, seed production, satellite nurseries etc., have to be started. This "Zero Year" comes one year before the commencement of the programme for each of the village or area. However, there is some misunderstanding among several staff of I.T.D.A. that there is one and only one "Zero Year" i.e., 1990-91 for the entire project. The correct position has to be made known to them.

Awareness Raising Process and Motivation Meetings (Grama Sabha):

The Project Appraisal Report and various guidelines evolved by the project co-ordination unit, to operationalise the concept of participatory community development, envisaged a series of Motivation Meetings as instruments for raising the awareness of community, understand the project philosophy and content. The first motivation meeting or grama sabha, is to be conducted in the "Zero Year" with sufficient lead time for other programme specific motivation meetings.

The immediate out comes expected of the Grama Sabhas are (i) identification of needs of the tribals by themselves (ii) sensitisation of project staff to reorient their functioning to the participant needs and project philosophy (iii) intialisation of group dynamism among tribals leading to formation of Tribal Community Groups (iv) selection of a liaison worker (VLW) by the tribals to act as an interface between the functionaries and themselves.

The modus operandi followed by the functionaries in conducting the Grama Sabha is given below, along with qualitative observations derived from the discussions with the tribals of sample villages.

Table:2 Coverage details of Grama Sabhas as start up process indications

(in percent of surveyed villages)

S.No.	I.T.D.A.	Conducted in the village	Conducted outside at focal point for a group of villages	Partial meetings only held	Not conducted at all
1.	Seethampeta	60	20	20	-
2.	Parvathipuram	44	11	5	40
3.	Paderu	30	30	-	40
4.	Rampachodavaram	75	10	-	15
	All	**48**	**20**	**4**	**28**

As can be seen from the above information, the Grama Sabhas were conducted in 68 percent of vilages either in the village itself or at a focal point for a group of villages. The functionaries who accompained the teams explained that since some of the habitats or hamlets of villages are of small size in terms of number of house holds, the grama sabhas were held at focal points or sometimes through partial meetings only. In about 28 percent of villages, people are not aware of grama sabha. It may also be noted that the variations in approach to hold Grama Sabha among the I.T.D.As. broadly is accordingly to the settlement pattern of the habitats and villages.

It was found during the discussions that the "Gram Sabha" as perceived was not conducted. Another important finding is that language as a communication barrier creeped-in in conducting the Grama Sabhas at focal points. Telugu language, with which all functionaries are wellversed was used in the meetings which was not understood by some of the tribal groups. (Ex: Sankidigondi Village as they speak corrupt Orriya). The Kui speaking Khonds of Kotagummam village of Hukumpeta Mandal who attended the Gramsabha at Bakuru also informed that they could not follow the speeches made in Telugu. They also informed that during the later visits of functionaries and meetings conducted in the village with local tribal youth as interpreter they could understand about the project and programmes.

The procedure to be followed in these meetings should have been in such a way that the people discuss among themselves the problems faced by them and programmes to be taken up by identifying the total potentiality of the village (natural as well as human resources). As the meetings in many cases started in the routine way with explanation of the programmes and targets included in A.P.T.D.P. by officers, it has

only resulted in partial realisation of outcomes. The study teams observed that wherever Grama Sabha was conducted and follow up motivation meetings were held, the people are coming forward without any hesitation to put forth their views, indicating the first out come of group dynamism process. Women who are generally shy to come out and participate in the Sabha are now seen closely move with the woman community development co-ordinators who accompained some of the teams and participate in the meetings. In the other teams also, although women did not come out and participate in the discussions, they are seen closely following the procedings of the session from near by houses and at times suggesting in their native tongue something to their men folk or calling back men folk to whisper in their ears to project their views also.

The other important thing that should emerge from the discussions is the formation of a Tribal Community Group (TCG) by the tribals themselves. But here also in many cases, the Tribal Community Groups have been organised by persons nominated by I.T.D.A. Officials as presidents or organised by a former Sarpanchas or petty contractors belonging to tribal community on the advise of I.T.D.A. officials. However, the positive points seen in all the Tribal Community Groups in sample villages are:

i) They are accepted by the tribal communities, and as the team has not seen any opposition to the office bearers during several hours of discussions in the survey villages;

ii) The other important aspect noticed is the emergence of pressure groups in the village, especially from the youth, who are working as watch dogs in the implementation process but at the sametime participating fully in the programmes. As most of them are Primary or Upper Primary School dropouts, their awareness of outside world is good and is helping them to communicate well with officials. Since they are school dropouts at that stage, they returned to agriculture unlike the high school dropouts whose participation in local economy and organisation is negligible. It is interesting to note that these semi-literates are useful to the community as a potential force eventhough they come under wastage category speaking purely from the education angle. Participation of these youth may have to be specially encouraged.

iii) The central idea of the project like people's participation, i.e., the need for implementing the schemes like soil conservation, irrigation etc., by themselves has reached most of the villagers as each one of them is able to explain the importance of community organisation for implementing their own programmes to ensure good quality of work at reasonable expenditures by always comparing with the works done by outside contractors who always constructed structures which are qualitatively inferior and at the same time involving a very high cost.

iv) As the tribals are already exposed to I.T.D.A. schemes over the last 15 years, they developed awareness which has helped them in quickly grasping the new concept of implementation of the schemes through community, although in a few cases the hangover from the past is still lingering. When asked to comment on the difference between past and present approaches, one tribal from Boddam Kharja (Parvathipuram) stated in his own way that previously they were "seeing the programmes being implemented but now they are implementing them."

Village Liaision Worker (VLW):

Another important development that was expected from the "Grama Sabha" is selection of a Village Liaison Worker by the villagers who would become a key extension agency. As per programme, there would be one liaison worker per hundred farmers and he/she would be trained in horticultural techniques and food crop husbandry. The incidence of selection, experience portfolio, and performances revealed by the tribals during the survey are as follows:

Table:3 Evaluation Indications of Village Liaison Workers: Selection process, experience and performance.

(in percentage of sample villages)

S.No.	I.T.D.A.	Selected by the community	Already experienced as liaison worker	Satisfactory performance as perceived
1.	Seethampeta	100	60	100
2.	Parvathipuram	55	-	100
3.	Paderu	37	23	77
4.	Rampachodavaram	75	25	60
	All	**58**	**24**	**74**

In many cases, the village liaison worker (VLW) was selected by the community. In others, the develolpment functionaries nominated the workers. In both the cases, the abilities of the worker to communicate with officers and villagers as well, were assessed. Generally a young educated and healthy person (most of them males only) capable of moving around was selected. Most of them are from the same village or from the same Gram Panchayat and all of them are tribals. It was also verified whether there are any other persons in his famiy who can take care of his agriculture etc., if this worker is moving around. Only after satisfaction of all these qualifications, the worker was selected. Some of the VLWs were reported to have worked earlier either in the social forestry programme or G.C.C. loaning programme. However, in a few

cases, where the tribals were not satisfied with the performance,they replaced the VLWs with other. During discussions, the tribals did not want to elaborate further on this issue. But in many such failure cases, it could be inferred that such VLWs could not adjust to the new procedure of A.P.T.D.P.

In the study, it was found that all the villagers in all sample villages are currently satisfied with the work of the village liaision worker "as he is useful to the society" eventhough in some cases he was not from the same village or he does not belong to the same tribe.

Amidst the acceptence and appreciation of their performance by the villagers, the Village Liaision Workers suffer from the following:

i) The Village Development Officers and also officers of I.T.D.A. treat the Village Liaision Workers as their subordinates where as the Village Liaision Worker should be subordinate to village community only, as per concept. This aberration has come because the I.T.D.A. through its officials is paying the honorarium. Therefore it is recommended that the budget for the scheme may be directly released to the Tribal Community Group for payment of honorarium from out of scheme funds on satisfactory service.

ii) Eventhough the Liaison Worker is for the entire village community, most of them are aware of the Horticulture and agricultural extension programme only takenup in the village. Many of them are not aware of the details of the irrigation and soil conservation programmes implemented or being under execution in their villages. This is, once again, due to the fact that his remuneration was given mostly by Horticulture or Agricultural Officers. It is recommended that the concept of the Village Liaison Worker as a person responsible for entire community and for all programmes as key extension agency, be implemented in toto.

iii) The Village Liaision Worker in future (new areas) may be selected by the villagers themselves.

iv) Women Liaison Workers may also be selected who would be useful in organising the women.

CONSERVATION & CONSTRUCTION ACTIVITIES (ON FARM CIVIL WORKS)

Natural resource development is one of the components of the Project. Soil, water and forests are the natural resources considered here. Since one of the objectives of the project is arresting soil degradation and rejuvenation of soil fertility in the 'Podu' patches along with creation of moisture regime, soil/ water conservation programmes are found to be important interventions. The expected immediate outcome of the interventions is arresting of soil erosion, facilitating accumulation of top soil layers and consequently resulting in improvement of crop yields in the long run. The impact will thus be not only limited to tribal areas in terms of environmental protection, household food security but also extends to the other tribal and non-tribal areas in terms of reduction in siltation of rivers, major or medium irrigation dams etc. Water shed based development approach is specifically introduced for this purpose. Apart from halting the soil erosion on podu lands, the wage incomes or shared profits that accrue to the tribals during implementation of the programmes result in creation of temporary household food security by increasing their purchasing capacity during the period. Besides, leaving aside his cultural obduracy in creating new podu patches, the tribal although aware of the importance of soil conservation (often times appropriate measures also as in the case of Savaras), he does not find enough labour and time to undertake the same, because podu cultivation is highly labour intensive one.

Small scale irrigation programmes are aimed at tackling the household food security and conservation problems through a different angle. The immediate expected outcome of the programme is arresting soil erosion in the course of streams, increasing the cropping intensity on valley and plain lands and crop yield improvement. Wage incomes accrued during the implementation period as described above adds to the food security for a short period.

Strengthening of Horticultural Nursery cum Training Centres (HNTC) is also considered under construction activities. This aspect is discussed in the next chapter.

As the impact of the conservation and construction activities can be felt in a very long run only, quality of structures and their maintenance receive the immediate attention. Participatory Management streategy is found to be approapriate here to ensure both, besides providing profits and 'wage' incomes to the tribals. The project authorities identified the following broad processes for excution of these programmes.

- Tribal Motivation Meetings by the functionaries
- Selection of fields and sites by the community

- Execution of the works by the community through formation of village development committees or special groups, with guidance from engineers of I.T.D.A.
- Maintenance of irrigation structures, catchment area treatment and field channels by VDC or Water Users Associations,
- Ploughing back the profits (after meeting the wage component) to initiate other community development activities.

In the following sections,how these processes are adjusted to suit the local conditions and their efficacy in bringing in the desired out comes is discussed on the basis of the survey findings.

Soil Conservation:

It was envisaged in the appraisal report that "the Soil Conservation works would be implemented using the farmers own labour for which they would receive payment". Further, "to encourage greater self-reliance amongst the community, some of the payments for soil conservation labour, could be credited to the Village Development Fund. The village committee would decide how much the farmers would be paid and how the balance would be used eg. for the provision of community infrastructure". In practice, however, the above procedures are followed in few cases. The information in the following table summarises the procedures that were followed and the impact. The physical achievements vis a vis the targets envisaged in the appraisal report are presented in Annexure-II.

Table:4 Process Evaluation indications of soil/water conservation programme

(in percent of villages surveyed & spot checked)

ITDA	Participation in works						Quality of works		
	Motivation meetings conducted	sites selected by villagers	Tribals of the same village	Tribals of other villages also	Tribals & non tribals	Non-tribals only	Good	Ave-rage	Not satis-factory
S.peta	100	100	33	-	67	-	33	-	67
P. puram	29	43	29	43	14	14	14	71	15
Paderu	80	40	47	27	26	-	53	47	1
R.C. varam	50	50	-	-	38	62	13	13	74
All	64	52	31	21	30	18	33	42	25

From the above information, it can be seen that, motivation meetings, primary awareness raising sessions are conducted in two thirds of sample villages, although, there are variations among I.T.D.As. As a result the tribals only in more than half of the villages selected themselves the vulnerable sites for carrying out the conservation and development measures. It can also be noticed that inter I.T.D.A. variations reduced in this process when compared to the first one. In tune with the above two indicators, tribals of the same village and in some cases availing the labour force from the neighburing tribal villages executed or participated in the works in more than fifty percent of villages. The correlates between the indicators signal some oddity in the case of Seethampeta & Rampachodavaram. It may also be inferred that, on the whole, wage benefits leaked to non-tribals in 18 percent of cases completely (maximum of 62 percent in Rampachodavaram). Assuming tribal, non-tribal shares as 50:50 in the case of mixed participation, another 15 percent leakage occured, mostly in Seethampeta and Rampachodavaram again.

Apart from the evaluation of quality of work by the tribals themselves, the engineering personnel of the study team, spot checked the works in a small sample in each vilage. In one third of the villages, the quality of works and maintenance is good and in some cases excellant. In 42 percent of villages they are of average quality. Only in one fourth of the villages the quality and maintenance are not satisfactory and may not last long. The study teams exhorted the tribals to take up corrective steps and explained the procedures. The correlates with other indications, clearly brings in the impact of participatory approach signalling sustainability in the case of Paderu and Parvathipuram predicament in the I.T.D.As. of Seethampeta and Rampachodavaram.

The case study based qualitative observations are as follows:

i) The identification of vulnerable areas was not always done in consultation with the village community. This has resulted in leaving areas not included in action plan, and therefore, not treated. These areas were left out in the subsequent year also as the staff went to the new villages included in that year. For Example, in Kantipuram village of Paderu I.T.D.A. the Villagers informed that Soil Conservation Works have not been taken up on Nandigommu Konda, Volipanasa Konda, Kattamamidi Konda, Revarigaruvu Konda, Bakidi Konda, Chadunugarra Konda and Godigaruvu Konda where the podu lands have been left fallow for regeneration. In Kamalabanda village of same I.T.D.A., Soil Conservation works were not taken up in the podu lands on Dividimali Konda, Oriyakal Konda, Banjimeetta Konda, Gadimetta Konda, Kotinjedi Konda. In Rampachodavaram, I.T.D.A., at Kundada village it was informed that soil conservation works are not taken up in Seetha Lanka, Musurumundu Lanka, Semakorabanda areas. In Bhimavaram and Kutrawada villages of same I.T.D.A. the soil conservation staff

informed that the conservation works could not be takenup in the fields of some families as they have not cleared the bushes and other tree growth in their podu lands. In Bhimavaram village, the soil conservation works are taken up only at foot hills leaving hill slopes and hill tops due to thick bush and tree growth on podu lands left fallow in the podu cycle.

ii) Some of the Soil Conservation works in the first year were taken up by importing labour from outside. During second year also, in few areas, the works are executed through labour brought from outside. For example, in Gadiguji village of Seethampeta Mandal, the soil conservation staff brought non-tribal labour from Ramannapeta and executed the work. In Gunada village of G.L. Puram Mandal of Parvathipuram I.T.D.A. Savara tribals of neighbouring villages were engaged as labour in soil conservation works. In Ramapachodavaram I.T.D.A. also in Denduluru village the non-tribal labour from outside were engaged.

iii) In some places, the tribal president of Tribal Community Group became only an 'Agent' to transact money as he was putting thumb impressions on the cheques issued on his name while the sub-assistants were encashing it and distributing to villagers, the details of which are not known to them. For example, in Torruru village of Rampachodavaram I.T.D.A., the soil conservation works were takenup by outsiders and a joint bank account was opened on behalf of the A.D. soil conservation and a villager by name Pallala Abbai Reddy. But this fact is not known to most of the villagers. At the time of payment, Pallala Abbai Reddy was taken to the bank by soil conservation staff and his thumb impression was taken on the cheque and they have drawn the amount. He was paid Rs.20/- and money for one meal in hotel.

iv) In some places where works were executed through tribals, wage rates have been paid directly to labour while in some places, cubic meter wise rates have been paid to the owner of the land treated who distributed equally to all those relatives who worked on his land irrespective of age and sex. The exchange of labour is an interesting aspect. Another interesting aspect of this wage transaction in Maredumilli area in East Godavari District is that the tribals decided among themselves that they would take only Rs.10/- per day as wage as the work is done for their kinsmen while the same tribals were demanding (as part of wage struggle of communist movement and getting) a wage of Rs.25/- per day from outside contractors or paper mills as the case may be.

v) The budget and programme proposed to be taken up in the village was made known to the villagers in I.T.D.A., Paderu, which resulted in excellent effect and impact of the programme. For example, in Kotagummam the soil conservation works were entrusted to the individual beneficiaries and bank accounts were opened in their names. They were also explained about the total extent of area

to be treated and the amount earmarked for the particular work. One beneficiary by name Vanthala Sambhu received Rs.12,800/- and after paying wages he could save Rs.4,750/- of which he purchased plough bullocks worth of Rs.3000/-, cleared old debt of Rs.1500/- and spent rest of the amount for purchase of wood for the newly constructed tiled house. The immediate and long term impacts are thus clearly discernable. The profit (which is the result of differed wage is spent to an extent of 63 percent to create farm assets (capital for agricultural operations - plough bullocks), 32 percent towards reduction of indebtness (one of the aims of the project) and five percent towards capital formation in the shape of improvements to housing (one of the minimum needs to improve living standards). The capitdal expenditure is expected to generate incremental income every year through multiplier effect and induce arable crop development and food security as envisaged in the project design.

In Sankidi Gondi Village, one beneficiary by name Pangi Donnu received Rs.12,300/- for the works done in 9.10 Hect. of his podu land. After meeting all labour charges he purchased plough bullocks worth of Rs.2000/-, clothes for Rs.3000/- besides released his mortgaged wet land by paying Rs.3000/-. Thus he saved an amount of Rs.8000/- from the soil conservation works.

In Tongikota four beneficiaries were entrusted with soil conservation works in an extent of 8-50 Hect. The individual wise details of extent of amounts received, savings and utilisation pattern are as follows:

S.No.	Name of the Beneficiary (Tribe)	Amount received (Rs.)	Amount saved (Rs.)	Purpose of Utilization
1.	Kimudu Saddanna (Porja)	4,216	2,000	Cleared old debt
2.	Marri Amri (Khond)	6,400	1,000	Purchased one bull
3.	Marri Livvu (Khond)	2,100	600	Bought Clothes
4.	Marri Manju (Khond)	1,400	500	Purchased Goat
	Total	14,116	4,100	

The receipts towards wage incomes when tribals participated as labourers only also created an impact on food security. For instance, one tribal from Boddam Kharja of Parvathipuram I.T.D.A., who worked as wage labour only informed the following.

- They received a wage of Rs.20/- per day for about 20 days during the premonsoon season.
- Two to three persons from each household participated in the works.

- 60 percent of wages received were spent towards purchase of rice from the G.C.C. Daily Requirement Depots, utilising the subsidy facility from public distribution system (PDS)

- About 15 percent was spent on household articles including clothing.

- Remaining 25 percent was spent on entertainment, ceremonies, consumption of intoxicants etc.

Thus, if an amount of Rs.1200 is construed as wage income to the tribal household, during a period when food security was low, Rs.600/- directly went to mitigate it, alleviating poverty incidence temporarily. In the absence of which tribals were dependent on income from M.F.P. sales, food collected from forest.

vi) It is a pleasant sight to see beautifully executed stone terracing by tribals in the most interior areas of Paderu I.T.D.A. The pains taken by the staff to reach those areas gave good results. The experience gained by tribals in the recent past in treating similar lands in their vicinity in catchment area of Machkund-Sileru river valley project has also helped them in quickly taking up the work on their own under I.F.A.D. scheme. However, the quality of scheme could not be maintained in some areas because of the large volume of work taken up simultaneously.

vii) In Vizianagaram district, the quality of work of stone terracing is not good in some of the villages the team visited. It was seen that the stones were merely arranged in a row. Even the work like digging of small trench was not done. In one village Gunada, Shri Biddika Raja Rao, S/o. Narasimha, a Jatapu who was entrusted with the work of soil conservation on behalf of the community was taken away for training in H.N.T.C. at Savarakotapadu as he was selected as a beneficiary under satellite nursary programme also. Precious time was lost by the time he returned back and the sub-assistant in-charge of the programme "had his way" resulting in bad quality of work.

viii) The Graded bunding done in 1991-92 in many parts of I.T.D.A., Rampachodavaram, was found to be of poor quality. This is mainly because, the works were done with a target achievement attitude through non-tribal labour (mostly belonging to Uppara Community) imported from outside. In the villages of Torruru, Denduluru and Kutravada the standing crops like Gingilly and Jowar were damaged as the soil conservation staff in their anxiety to complete the targets have removed the standing crops on the identified contours. The villagers of Torruru and Denduluru have also stated that they have requested the Soil Conservation staff to postpone the works until the crop season is over. But their requests were not considered by the staff resulting in heavy damages to the crops, particularly to Gingelly, crop. In Kutrawada village, the soil conservation works were entrusted to outsiders who damaged the jowar crop of 10 beneficiaries

ranging from 1/4th to 1/2 acre in each case. In the next ploughing season, some of these bunds have been ploughed by the tribals as they are in the middle of their lands. Even other-wise, the quality of bunds was so poor that many of them were washed away during rains in the next season. Compared to these poor quality of bunds, the tribals constructed earthen bunds, rectangular or square type for their paddy fields which are extreemly good. When asked why they have not constructed the soil conservation works on their own when they are capable of executing such a good work, the tribals informed that they were not consulted by soil conservation staff and some people were brought suddenly from outside and the work was done in a haste. The soil conservation staff on the contrary, explained that they consulted the villagers. It was revealed that the soil conservation staff only mentioned about the work to people in a casual manner and tribals did not take it seriously. The outside labour was brought to execute the work. During 1992-93 also, similar approach was followed in this area.

ix) The team has also seen an excellent case of Gully Plugging in Kamalabanda Village, of Paderu. A Gully was formed during 1990 floods in this village making atleast ten acres of land un-cultivable. The Gully was plugged very scientifically by the villagers under the guidence of soil conservation staff and formation of silt layers was also seen. The farmers informed that the land is fit for cultivation now. In the event of similar flash flood in future, an arrangement has been made to divert the water to join the main stream.

x) The Ridge to valley approach needs to be followed like in Paderu area. In some cases, (Example Kamalabanda and Sankidigondi villages), the degraded hill top was not treated by the villagers under this scheme as it lies in the reserve forest, while the lands belonging to tribals on slopes below Forest boundary were treated. This will not serve the purpose as the untreated areas, when the natural vegetative cover is disturbed, causes damage to the conservation structures on the lower reaches. In such cases, the forest department should also be involved if necessary by releasing the required budget to forest department. Tribal participation, however, should be insisted upon in this case also. Possibility of taking up Agro-forestry schemes in such reserved forests may be explored like Orissa I.F.A.D. Project.

xi) The team has also come across cases of some nationalized Banks rejecting the deposits made in the name of village community for executing works on the plea that the tribals would be withdrawing the funds immediately and frequently. They seem to be bothered about the increase in work load forgetting their responsibility. They also seem to be interested only in the fixed deposits which will enrich their Bank rather than the small Saving Bank accounts of this sort which will benefit the poor. For example, in Pedagangudi village, the villagers informed that the

Manager of Andhra Bank of Sunkarametta to avoid work was refusing payments to the checks presented by the beneficiaries by saying that there is no sufficient amount in the bank. Consequently the bank account had to be transferred by I.T.D.A. staff to the bank at Araku.

xii) The team also has come across cases of tendency of soil conservation staff, especially in Rampachodavaram area to leave works incomplete in one village and to go to next village in the succeeding year by treating the earlier village as covered. For example, in Vetukuru village of Rampachodavaram I.T.D.A., it was informed that the area proposed for soil conservation works was 140 Hect. benefitting 30 farmers but only 129 Hect. was completed benefitting 27 farmers. In Bhimavaram village, the soil conservation works were proposed in 60 Hect. to benefit 15 families. But only 10 Hect. were covered benefitting four families. This has to be avoided and backlog completed by clearly assessing the magnitude of work to be done. For example, in our survey it was revealed that tribals were able to give names and other details of various hills/hillocks on which podu cultivation is being practised and some of them fall into the category of vulnerable areas.

xiii) Inspite of some of these aberrations, the positive effects of soil conservation, in lands treated systematically and where tribal participation is clearly evident, are felt by tribals. Good deposits of silt were seen in the lands and tribals reported slight increase in yields also in lands treated earlier. For example, in Guddumeediguda, H/o. Dabara in Seethampeta I.T.D.A., the villagers informed that there is an increase in the yields of maize crop raised in the fields treated with soil conservation measures. The team observed that the increase in yield per acre is about a bag (75 Kgs.). In other areas also where crops are yet to be raised in the fields treated with Soil Conservation works, the tribals are aware and confident that the measures control the soil erosion and improve the fertility of the soil. They are convinced of the benefits of this scheme.

xiv) Another interesting phenomenon observed was that the podu areas once treated, according to tribals, need not be left fallow after three years as in the past as part of podu cycle as the yields are found to increase. Some others informed that if all podu lands are treated like this, they will have three pieces of good lands per family for cultivation at a time compared to low yielding podu cultivation on only one piece of land at a time as part of rotation. For this purpose, it is necessary to take up soil conservation in three phases for each beneficiary as each person does podu on atleast three 'Podu' patches in a podu cycle of nine years (three years cultivtion followed by six years fallowing). The present programme covers only the present podu patches but not the podu patches belonging to tribals which are kept fallow as part of the cycle. The programme needs to be modified to that extent.

xv) The follow up action like taking up agriculture or horticulture programme in lands treated by soil conservation methods was not followed in many cases. Therefore, the agriculture development programme like supply of seed and other inputs (with I.T.D.A. funds) and sanctioning of loan has to be integrated to ensure a package of benefits to farmers for further increasing the productivity from land. The horticulture programme under I.F.A.D./I.T.D.A. should also be taken up in 'treated' areas on priority after discussing alternatives with tribals. The aberration of not following the sequence is observed in Paderu area inspite of temporary intervention. For instance, wherever Banana and Pine Apple mixed plantations were takenup, the horticulture staff encouraged the tribals to do bench terracing at middle or lower level slopes, outside the purview of Soil Conservation Programme as a total peoples contribution. Although the intentions are good and the quality of work is also good, leaving the upper slopes without any treatment may result in disturbances of terraces atleast in part of the areas. Treatment of upper slopes may be taken up on priority in all such cases.

SMALL SCALE IRRIGATION:

Water is one of the natural resources with which even the interior tribal villages are endowed with. Being a part of eastern ghats, the project area receives copious rainfall, with early showers in last week of April or first week of May to late receding showers in the month of December some times extending to January, especially in Paderu area.

Conversion of lands on hill slopes and valleys into small terraces and diversion of hill streams into them by constructing small earthen dams to ensure flow of water to these terraces one after the other has been an age old practise for tribals in these project areas. The tribals have been cultivating crops like Paddy, Banana etc. on these terraces. But the problem faced by tribals is that these earthen check dams are generally washed away often disrupting their agricultural activity. Moreover, they irrigate limited ayacut only.

The concept of people's participation in planning and execution of the irrigation schemes is being insisted upon in the field of irrigation as the contractors coming from outside in earlier years had only an eye on the profits from the works and therefore, the quality of work suffered. Some times, the location of the scheme was also wrong. Local tribals were not even employed as wage labourers in these works by the contractors.

The project authorities identified certain processess in selection and execution of the programme to ensure participatory development. The information in the following table summarises the observations of the team regarding the procedures followed, while the physical achievements via-a-vis targets (AWFP) are furnished in Annexure-III.

Before drawing inferences from the information and observations from case studies, it may be appropriate to mention that, engineering staff in the I.T.D.As. are under the impression that they have to execute the schemes identified in the "Master Plan for Minor Irrigation in Tribal Areas" prepared earlier. The Appraisal Report also cites in an oblique way about the master plan', which strengthened their view. However it was made clear that whenever the Master Plan Schemes co-incide with the sites identified by tribals, they can be executed.

TABLE : 5 - PROCESS EVALUATION INDICATIONS OF SMALL SCALE IRRIGATION PROGRAMME

(IN PERCENT OF SCHEMES COVERED AND SPOT CHECKED)

I.T.D.A.	Motivation Meetings Conducted	Site Selected by Villages	Entrustment of work to VDCS / Tribals	Participation in works				Quality of Work					
				Tribals of the same village	Tribals From other villages also	Tribals and non Tribals	Only non Tribals	Good		Average		Not Satis-factory	
								V	C	V	C	V	C
1	2	3	4	5	6	7	8	9	10	11	12	13	14
S'Peta	50	100	100	100	--	--	--	16	--	67	--	17	--
P' Puram	80	56	78	61	17	11	11	33	--	44	12	--	11
Paderu	33	33	33	33	17	33	17	33	--	--	67	--	--
R.C. Varam	67	38	23	69	23	--	8	--	15	54	8	8	15
ALL	61	53	53	66	16	9	9	17	6	44	18	6	9

NOTE: 'V' AND 'C' indicate Village Development Committee and Cotnractor respectively.

The above table reveals that for 61 percent of schemes motivation meetings were conducted by the functionaries, where as in about 53 percent cases the sites were selected by the community. Inter I.T.D.A. differences in these aspects are high as can be seen that in only 33 percent of schemes in Paderu the meetings are held and sites were selected by tribals for carrying SSI works. Prevalence of employing outside contractors and entrusting the works to them is observed in 62 to 67 percent of the cases in Paderu and Rampachodavaram. On the whole in about 47 percent of cases, outside contractors are seen executing the schemes. However the wage benefits by and large accrued to the tribals only. About 23 percent of the works completed or being executed are found to be very good, out of which 17 percent were executed by Village Development Committees or Mahila Mandalis only. In about one sixth of cases the S.S.I. works are found to lack quality. Sixty percent of works which lack quality are executed by contractors. The case studies and qualitative observations are presented in the following paras to provide information on these aspects.

The team had come across different kinds of approaches of entrustment of work followed in the four I.T.D.A. areas. Broadly speaking in Paderu and Rampachodavaram areas, the execution of works through benami contractors is still continuing. For example in Pinakothuru village of Paderu I.T.D.A., the work of construction of a Checkdam was actually entrusted to a non-tribal contractor eventhough the name of a tribal boy Sri Velusuri Chinna Abbaiah was shown on records. The villagers informed that the Asst.Executive Engineer told them that an initial investment of Rs.60,000 as deposit by villagers is necessary to takeup the work and an agreement to that effect is to be executed and thus he made the tribals shun away from taking up the work. But actually E.M.deposit is not to be insisted upon in case of tribals and the work under I.F.A.D. is to be executed by the tribals themselves. About 30 tribals worked as labourers along with non-tribal labour and masons. Cheques for payment were issued on the name of the tribal nominee who encashed and handed it over the amount to the non-tribal contractor.

In Kutrawada and Vetukuru villages in Rampachodavaram area, the construction of 3 Checkdams was entrusted in the name of the Village Level Committee president to one Devasahayam, a Valmiki, tribal from Maredumilli. It was informed during discussions with villagers that no village level committee was organized. But as per Engineering Department records, the works were entrusted to Village Level Committee President.

(i) As the approach of 'Gram Sabha' was not followed as conceived, identification of total potentiality was not done in many villages. For example, during discussion in several villages, the tribals were able to indicate locations for five

to six irrigation schemes (check dams and tanks) whereas the engineers had knowledge of only two or three schemes. The preliminary investigation on the suggestions of the villagers and discussions with villagers on the feasibility or other wise would have helped the villagers a lot. The traditional approach of planning of schemes by engineers themselves continues to prevail in Paderu and Rampachodavaram. There has been a marked change in Seethampet in past one year where participatory management has taken off in a big way as was done earlier in Parvathipuram.

In Rampachodavaram area in Palem village, the team came across an interesting case. The villagers asked for an irrigation tank. According to them, the water flows in the hill streams only on rainy days and therefore, a tank, which collects water, is the most feasible irrigation structure at that place. The engineers however, insisted that a Checkdam be constructed. Otherwise no scheme would be takenup. The villagers had no option. The president of the Tribal Community Group signed on the resolution requesting for a checkdam knowing fully well that a checkdam on a stream in which water flows only on rainy days would be a waste. Ofcourse, a tank was also planned in the lower reaches, in response to the tribals desire by the engineers. By the time the study team visited, both the structures were almost completed and the estimated investment on both these schemes put together is Rs.9.903 lakhs.

(ii) The works are to be executed through tribal groups of the same village and women groups are also to be encouraged. In Parvathipuram and Seethampeta areas, the women groups are found to be executing the works excellently. Works were entrusted to them directly, budgets were released on joint accounts (women group and engineers concerned) and works are being executed by the women groups only. In most places, they were also made aware of the different components of the programme like wages, material etc. Some of the presidents of the women groups are even able to tell orally the amount of money received and spent, the cement bags and other material received and utilised etc., for execution of works. They are also maintaining small note books showing the details either written by themselves or helped by an educated person in the village, in case the president is an illiterate. Another interesting feature of participation is that the concrete mixture was done so well that, (in their own words), 'a strong structure should be constructed'. The engineering staff are also educating them about the foundation to be laid and the structure to be built. However, the concrete mixing is being done manually in many cases and the engineering specialists of this research team on seeing some minor defects in the structures

have guided the women groups about the need for putting concrete without giving scope for holes in the structure. Similar guidence exercise by the local engineers is also necessary in other I.T.D.As. as the tribal's enthusiasm and involvement added with technical input from engineers will help in constructing good structures.

It is also a pleasant experience for the research staff to see all the men, women and children from the ayacutdar families working together as they said that "they are constructing their own structure for their own betterment". Regarding the wages, men are paid Rs.20/- per day, as according to the Women President, they are doing hard work like digging earth, removal of big boulders etc. The women are being paid Rs.13/ - per day only as they are engaged in concrete mixing, carrying water, etc., which according to them are less strenous works. This gender differenciation in wages is being implemented by the women groups on their own will even though they are aware of the fact that minimum wages as per wage policy of the Government are higher than the wages now paid by them and also that men and women should get equal wages. It is also interesting to learn from the same group that they were demanding under labour union movement that maximum wages should be paid as per Government rules from outside contractors for doing similar work in the same area.

Admidst the success stories in Vizianagaram district, the team has come across a stray but an interesting case of formation of women and men group in Sikhalbai village in G.L. puram mandal for the sake of work only. The work of construction of a school building and two checkdams was "entrusted" to these groups. Both the presidents are not aware of the details of the scheme. They are not able to tell even the minor details of the scheme. They are not able to tell the name of the bank from which the amounts are being drawn. All the workers, however, are only tribals. The women group according to its president Smt. Biddika Parvathi is having only three members eventhough there are about 27 house holds in the village. The president of the mens group of the Gunada village complained that the windows got prepared by him through local non-tribal carpenter are strictly according to the specifications given by the engineering supervisor but according to the president the supervisor has taken away those window panels and replaced with another set of panels brought from G.L. puram. On enquiry by the team, the supervisor informed that the poor quality window panels manufactured by the local carpentor had to be removed to ensure quality. The tribal is worried that the expenditure made by him has gone waste. This kind of confusion could have been avoided if the supervisor has taken some more interest in helping the tribal to locate better skilled carpentor. Another point to be mentioned here is the organisation of women groups for name sake and implementing the scheme as explained above is against the spirit of the concept of participatory management approach. The

engineering specialist in the research team has, however, found all the structures constructed by women groups to be very good It is a case of a good structure constructed by engineers with tribals as labourers but involvement of people in planning and execution is only name sake. The people would have psychological association and participate in upkeep of the structure only when they construct the structure by themselves and for themselves.

In Rampachodavaram area, the team was also informed that the construction of some low cost check dams has been entrusted to the soil conservation staff. In view of the poor quality of soil conservation bunds constructed by them during the last two years, and also that they are not technically equipped to take up irrigation works, it is desirable to take a fresh look at the allotment of irrigation works to them. In Kundada village of Rampachodavaram I.T.D.A., the work of a low cost checkdam (estimated cost is Rs.5,000) was entrusted to Soil Conservation staff. The work was executed through one of the ayacutdars. But during the execution, technical guidance was not given by the soil conservation staff. The work is left incomplete. Only half of the masonary wall was constructed with a very bad work manship while rest of the half is filled with boulders and soil for diversion of water. The water is seeping through heavily as the boulders are distrubed. This kind of structure will not stand the gushing waters during heavy rains, according to the engineers of the study team.

The team also found in many cases that the catchment area treatment was not done resulting in silting up of checkdam within one year of construction and thus reducing the ayacut. The tribal ayacutdars should be given training in the maintenance of the checkdam. It is noticed that in AWFP '93-94, specific provision is also made for the purpose. In Jalubuguda village of Seethampeta I.T.D.A., a check dam was constructed by the Tribal Community Groups during 1991-92, at an estimated cost of Rs.60,000/- benefitting 16 families. The team observed that the checkdam can not be put to use as, the checkdam and field channels are fully silted. When enquired the tribals revealed that, they are still undertaking land development work. The silt deposited can be used for such works. They also informed that after few years, when the vegetation on the upper reaches improves, silt formtion will be reduced.

The team has come across few cases of stoppage of work in Srikakulam and Vizianagaram districts due to shortage of cement or absence of work inspector to give further guidence. The tribals are worried that their traditionally constructed checkdams were demolished to take up these new works and now the new structures are not ready. Therefore, water may not be available for their Kharif crops. Such problems demoralise the enthusiastic participants.

It was also found that the masons are generally brought from outside and they are demanding a very high wage of Rs. 60 to 70/- per day besides food and shelter till the work is completed. It is, therefore, recommended that the tribal youth be given training in masonry. Necessary initiation in the direction already started in Parvathipuram. Finally it is recommended that all the tribal office bearers of the men or women groups should be brought together each year in the rainy season and a work shop is to be organised to exchange their experiences and also to formulate a clearcut programme for easy execution by the tribal groups. It is interesting to note that the technical words like foundation, check measurement, levels etc., already became part of tribal vocabulary but spelt out in their own accent.

CHAPTER-V

ECONOMIC DEVELOPMENT AND EXTENSION ACTIVITIES (HORTICULTURE & ARABLE CROP DEVELOPMENT)

Natural resource development and human resource development strategies are integrated here through a multiple sequences of processes for ensuring sustainable economic development and household food security along with ecological security. Conservation and construction progrmmes discussed in the previous chapter are expected to provide the necessary environmental intrastructure for horticultural and arable crop development activities when the involved processes are integrated appropriately.

The arable crop development as per Appraisal Report, is to be carried out through provision of crop loans for purchasing improved seeds, fertilisers, etc. The extension activities comprising of establishment of farmers seed production sites, Demonstration plots, on-farm informal trainings and technical advises through Agricultural Consultants and VLWs are envisaged to increase the yield rates and farmers awareness about better crop husbandry practices. The out come, effect and impact of these measures are expected to be revealed by improvements in the yields, technology adoption rates, and food sufficiency for the households in the long run. Sustainability aspect of the outcomes of the extension activities depends upon the readoption rates.

Horticulture programme is to be carried out with mixed plantation on podu lands, leaving enough land for raising the traditional podu crop, with improved practices ofcourse, so that existing food security levels are not affected and the tribal cultures and customs are not perturbed too much, lest it defeats the entire objective of the programme, that is "insitu" rehabilitation of podu farmers. While the fruit crop trees of various types are expected to provide sustained income and food security to the tribals, plantation of Minor Forest Species may reduce their dependency on natural forests to some extent or supplement their M.F.P. collections which are dwindling already (in per capita terms) due to population pressure and reduction of natural forests, increased timber plantation and logging activities of forest department. The trees, both of fruits and minor forest species are expected to rejuvenate the bio-mass density on podu lands and lead to ecological security, vicariously aiding the conservation process. The important programmes planned for Horticultural Development are H.N.T.C. support, for which the project provides funds for strengthening infrastructure, establishment of farmers satellite nurseries to provide necessary backward linkages and plantation programme.

M.F.P. procurement, output marketing, storage and processing activities of Girijan Co-operative Corporation (GCC) are expected to provide forward linkages, especially in utilising the existing (forest produce) resources in the short run and expected fruit crop production in the long run. Credit activities by G.C.C. to a large extent and commercial banks on a limited scale are assumed to strengthen the backward linkages required for the above development activities. GCCs role is crucial as it has to deliver inputs linking through its marketing net work. As mentioned earlier, since the evaluation of loaning programme was done by Tribal Cultural Research and Training Institute already and also that the G.C.C. has launched special consultancy studies connected with other activities, especially research and development programmes for processing the M.F.P., the scope of this study and therefore this chapter is limited to the remaining processes governing the development and extension activities.

It may be appropriate to note abinitio that, by the time the procedures for start up process crystalised, the main season, for undertaking various backward linkages of activities was half way through. Extension activities to a limited scale were thus taken up during the first year, 1991-92. The plantation activity as envisaged by the appraisal report, however, was started in 1992-93, utilising the existing resources both inside the project area as well as out side. The scope of the study is therefore focussed on extension activities and their effect on plantations.

H.N.T.C. SUPPORT:

Major objectives of H.N.T.Cs located in the I.T.D.A. areas are:

i) To carryout Adaptive Research & Development activities in colloboration with Andhra Pradesh Agricultural University by undertaking trials for aclamatisation of various plant and vegetable species for transfering latest trends in horiticulture and olericulture technology and practices.

ii) to produce quality plant material for supplying them to tribal farmers.

iii) to establish model demonstration nurseries and orchards to dessiminate knowledge and experience in improved varieties of Horticulture crops and to supply scion material whenever required for undertaking grafting etc.

iv) to conduct various types of training programmes for raising and maintenance of nurseries, plantations, backyard gardens by tribals.

In the Appraisal Report it is envisaged to strengthen the infrastructure of H.N.T.Cs. to improve their capacities with reference to the above objectives and project targets for undertaking extension and plantation activities.

Infrastructures Strengthening:

The processes envisaged for strengthening infrastructure are:

i) Constitution of team in each I.T.D.A. with the line department officials and project functionaries, to visit existing H.N.T.C. and assess the infrastructure gaps with reference to land development, irrigation, fencing, plant protection Tools & equipment, buildings, training material & equipment, capacity of existing orchards for supply of scion material etc,

ii) Estimation of physical and financial requirements, to incorporate in a phased manner into Annual Work and Financing Plans of A.P.T.D.P.

iii) Execution of Activities:

In practice it is observed that, instead of preparation of comprehensive plan the project authorities resorted to need based planning every year, to dovetail the available finances. Plant protection equipment, vehicles including tractor for ploughing are purchased and are utilised effeciently for delivery of plant material. The observations of study teams are furnished, in the following paras.

Very close to Seethampeta village, head-quarters of I.T.D.A. there is a H.N.T.C. at Panukuvalasa in which a bore well was dug at a cost of Rs.40,000/- to provide irrigation. The yield is reported to be sufficient for the operations in H.N.T.C. But the lands are alkaline in nature and undulating. Moreover, the earlier plantation taken up was not in a planned manner. In order to make a better H.N.T.C. support available, one more H.N.T.C. is being organised at Turupuvalasa, three kms. from Seethampeta on the road to Palakonda. As the proposed H.N.T.C. is located on the road side and close to the place where weekly market is being held for this tribal area, it was thought that the new centre will have a better demonstrative effect. Land development, purchase of implements, fencing and developing irrigation source were taken up at a cost of Rs.6 lakhs. Different varieties of Mango , Guava, Tamarind etc., have been procured from H.N.T.C. Garemellapadu, of Bhadrachalam I.T.D.A., and plantations will be taken up by August/September, 1993. (The H.N.T.C. is expected to be ready very soon). The team feels that the old H.N.T.C. may be put to some other useful work as infrastructure like training complex is also available there. Dormitory is required to be built.

In case of I.T.D.A., in Parvathipuram, the H.N.T.C at Savarakotapodu near G.L. Puram, the activities like land development, irrigation, creation of additional facilities have been done. But other infrastructure like dormitory, training complex and training aids like specimens of disease-pest, charts etc., have to be developed for use in training programmes.

Irrigation facilities have been improved in H.N.T.Cs at Kothavalasa, Padmapuram and Chintapalli in I.T.D.A., Paderu area. Action has been initiated for establishment of 'green houses'. The H.N.T.Cs require dormitory and training complexes. The H.N.T.C. at Padmapuram near, Araku in Paderu area, became a tourist place. The officer in-charge informed that most of his time and that of the workers (especially on holidays), is spent on receiving the visitors and also in keeping an eye on their movements. Since this is an educational institution, the time spent on teaching, practicals etc., will be affected by the 'Public Relations' activity of this sort. The added problem would be spoiling of the plant material produced in H.N.T.C. A view has to be taken on this as tourism should not hamper the functioning of training educational institution.

In the H.N.T.C. at Sirigindalapadu, of I.T.D.A. Rampachodavaram, the irrigation channels have been rectified. The training complex is available but dormitory is required. Charts, models etc., have to be developed as teaching aids. Establishment of Greenhouse is being planned. The Appraisal Report originally envisaged, strengtheing of H.N.T.C at Maredumilli by appropriate land development measures. The focus is now shifted to Sirigindalapadu.

Training: No training was taken up during 1991-92 in H.N.T.C at Panukuvalasa, in I.T.D.A., Seethampeta for satellite nursery farmers while 28 tribals were trained in plant propagation methods in 1992-93 and they have established satellite nurseries also. In S.K. Padu in I.T.D.A., Parvathipuram, 57 tribals (five females) were trained for organising satellite nurseries. In the three H.N.T.Cs. located in I.T.D.A. Paderu 186 persons were trained during 1991-92 and 1992-93, but satellite nurseries have been organised by only 176 tribals trained. In Rampachodavaram I.T.D.A., 10 satellite nursery farmers have been trained apart from 80 liaison workers and 145 orchard growers. All the 10 persons trained have established satellite nurseries during 1992-93.

R & D Innovations & Plant Material Supplies: First time in the history of H.N.T.Cs.,grafting techniques on an experimental basis are applied to crops like Tamarind, Jack fruit. The results are to be seen of course after three to four years. Excepting H.N.T.C. Seethampeta all the other H.N.T.Cs. supplied the plant & scion material as envisaged.

An analysis of the functioning of H.N.T.Cs have revealed the following.

a) The training facilities are inadequate;

b) Although various training programmes, for farmers, liaison workers, satellite nursery farmers were conducted, documentations and post-training monitoring integrated with other operations is not done;

c) The production of plant material is also inadequate for many crops except mango compared to the demand. The Horticulture crops proposed to be taken up under

I.F.A.D. and the production of plant material especially in case of pineapple and banana do not have any correlation. Huge quantities of plant material continued to be brought from outside market resulting in excess expenditure besides high mortality of the plants in transport particularly with regard to pine apple. There is need to have a long term perspective plan as already instructed by Commissioner of Tribal Welfare in recent Project Officers' meetings.

d) Frequent transfer of officers or vacant posts for longer periods has affected the organisation of production of plant material and training programmes;

FARMERS' SATELLITE NURSERIES:

Farmers' Satellite nurseries were proposed to be organised mainly to produce plant material in the vicinity of the plantation programme. Besides providing good income to the tribal youth organising the satellite nurseries, the plant material produced in the same agro-climatic zone ensures better survival rate compared to plant material produced elsewhere.

This programme is first of its kind introduced in the tribal areas of the project, although here and there some experimentations was done previously. The appraisal report and working papers are silent about the processes and out come albeit targets along with 'investments', for raising farmers satellite nurseries are given. It is expected that each satellite nursery should be raised in 0.5. hectares of area, indicating, broadly the implicit economics and range of its service or produce. The physical achievements vis-a-vis targets envisaged are furnished in Annexure-IV.

The project co-ordination unit, as mentioned earlier, identified the involved processes in terms of calender of operations and communicated the same during 1991-92. Since the programmes are highly technical oriented, engulfing differrent agro-climatic zones, involving the physiological charactiristics of wide spectrum of species and concomitant agronomic practices, there are many opinions. For instance, how much time can be lapsed in a nursery for a Mango seedling before grafting and before plantation after grafting is still being debated as the available evidence from the field is not leading to any conclusion. Keeping in view the nuances, the processes are identified afresh (Annexure-V) to cover three plan years or collapsed into two plan years depending upon field conditions, tribals apathy to long duration programmes. The key indicators are presented below followed by case studies.

Table 6: Process Evaluation Indications of Farmers' Satellite Nursery Programme

(in percentage of number of cases covered & spot checked)

I.T.D.A.	Site selection satisfactory	Adequate Training	Timely Delivery of Equipment & Material	Satisfactory performance	Satisfactory maintenance	Continuation or sustainability or Read option
Seethampeta	67	67	67	33	33	33
Parvathipuram	100	100	80	60	60	40
Paderu	75	38	0	0	0	0
R.C. varam	No nurseries are available in the vicinity of surveyed villages	-	-	-	-	-
All	**81**	**63**	**46**	**31**	**31**	**23**

Before discussing the evaluation indications shown above, it is to be noted that the sample coverage is indequate when compared with the targets as well as reported physical achievements. The information portrayed above as well as the case studies presented in the following paras reveal diagnostic details to facilitate corrective action. The evaluation signalls that in Parvathipuram and to some extent in Seethampet only the processes envisaged were followed resulting in desired out comes atleast to a certain degree. There is a need to review the failures of management but not the performance of tribals or extension functionaries at lower levels. To improve the sustainability of income the project co-ordination unit is linking the programme with vegetable cultivation. Under this programme each satellite nursery farmer is encouraged to grow vegetables also and supply the same to Ashram Schools.

The team has visited a number of satellite nurseries and following are the important observations.

a) In some cases Satellite nurseries have been allotted to tribal youth who have not been trained. For example Sri Janni Prasada Rao, S/o Chinnaiah, a Konda Dora youth of R.K. Nagar of Paderu I.T.D.A. He is raising the nursery with the guidance of Horticulture Officer and Village Liaison Worker.

In Pedakondapalli village of Paderu I.T.D.A. 3 farmers were selected for taking up satellite nursery in the same village. They were not given any training in horticuture, but were sent to Bangalore to learn latest techniques in vegetable cultivation.

b) Satellite nurseries have been started along with the plantation programme where as it should have been started atleast one season in advance. For example in Tadaka village of Paderu I.T.D.A., Plantations of Banana and Pine Apple were taken up in the year 1992. It is also proposed now to take up satellite nursery in the same village with Mango, Jack fruit, Kamala and other Minor Forest Produce species.

c) Satellite nurseries should have been taken up where the elite mother plants are available for supply of scion material. But in number of cases the nurseries have been supplied with mango grafts as a source for scion material. Such satellite nurseries have to procure bud sticks either from H.N.T.C. or nearby orchards till their scion block develop.

d) In some other places, there were no satellite nurseries any where near the proposed plantation areas. For example, in Rampachodavaram I.T.D.A., Plantation programme has been taken up in Ramannavalasa, Torruru and Denduluru villages in 1992-93. But no satellite nursaries have been taken up in these or neighbouring villages. In Kutravvada village of the same I.T.D.A., the plantation programme has been taken up during 1992-93 but satellite nurseries are being taken up in 1993-94.

g) Due to the reported centralised purchase system of polythene bags resorted by the Project Management in tune with I.F.A.D. guidelines for bulk purchases, delivery schedule for supply of bags is disturbed some times as is observed in the case of Gunada village of I.T.D.A., Parvathipuram.

h) Among the successful satellite nursery farmers, the school drop outs from Upper Primary level are sizeable in number.

i) Some of the satellite nursery farmers who organised them successfully in earlier years have discontinued. The reasons were mostly lack of follow up from the extension agencies as they seem to be concentrating on organising new nurseries only.

j) It is also necessary to diversify the nursery programme to cover vegetable seedling supply for vegetable cultivation, Horticulture, besides M.F.P. and commercial forestry so that sustainability of the programme increases by linking it with the World Bank Assisted Joint Forest Management Programme of Andhra Pradesh, expected to start from 1994-95.

The following are some of the case studies of the satellite nursery farmers.

1. Sri Biddigi Mohan Rao, S/o Appala Swamy, a Jatapu tribal youth was given nursery in May, '92. He was imparted one month training in H.N.T.C., Seethampeta in various methods of nursery management. As a part of training he was taken to Rampachodavaram and Sangareddy for field knowledge. He raised Mango nursery in 0.20 acres. Inputs like implements, fertilizers, pesticides and parent material was supplied by I.T.D.A. Technical guidance was given by concerned Horticulture Officer. Varieties like 'Banganpalli' and 'Collector' were supplied to him. In total 3500 Mango grafts are available with him Scion material was purchased by him at 'Komara' village at the cost of Rs.0.25 per stick. There is no permanent water source for him as only a small hill stream is availabe near by the nursery. In summer the water shortage is acute and he resorted to pot watering to save the plants. Out of 3500 plants reported to have been grafted, only 2500 plants were availabe on the date of visit. The reasons for this heavy mortality attributed to lak of water in summer and cattle menace. He wants to sell the plants to I.T.D.A. at the rate of Rs.10-00 per plant, and by this he expects to get Rs.25,000/- from his nursery. He also stated that he will continue to grow the plants like Mango, Cashew, Kamala and coconut in future. He said he started the coconut nursery already, but some of the coconut seedlings were stolen away by some persons on the night of plantation of coconut seedlings.

2. In Killada Village of Seethampeta I.T.D.A., Sri Areka Mohan Rao, S/o Mukhalingam a Jatapu, was identified to take up satellite nursery programme during 1992-93. He was given technical training at H.N.T.C., Seethampeta for one month. The beneficiary was given agricultural implements, one bag of neem cake, one bag of B.H.C. 10%, one bag of Potash, and one litre endosulphan. He has produced 325 mango grafts, 20 Jack plants, 280 coconut plants and 100 Pineapple plants. The plant material is healthy and ready for distribution. The beneficiary is very enthusiastic and planning to graft 20,000 mango grafts this year and he has collected the required material like mango stones, polythene bags etc.

3. Sri Biddika Sankara Rao, S/o Vasantha, a Jatapu youth was given nursery in this year. He was given training for 3 months (Jan. '93 to March, '93) at Savarakotapadu H.N.T.C. and he has been taken to Hyderabad, Sangaeddy, Rajamundry and Guntur on study tour. I.T.D.A. has supplied all implements and inputs for raising the nursery. He started the nursery programme in May, '93. Mango, Cashew and M.F.P. species are the main plants in his nursery. He is having a good source of open well for water to supply to the nursery. But he is not having oil engine or electric motor to draw the water from the well. As a temporary measure he hired one oil engine from his relatives at Rs.150.00 for 3

months. The study team informed about the case and the Project Officer agreed to supply it very soon. A good begining was made by him and the team members felt happy by seeing his nursery. He has provided a very good fencing. He has already sown 15000 mango stones of local variety by purchasing them at a rate of Rs.70-00 per 1000 Cashew (3000) also sown on the date of visit. By seeing the preparations and work at this nursery the team members got a strong belief that this should be succesful story in the near future. The farmer is very enthusiastic to raise the nursery.

4. In Kanasingi village of Parvathipuram I.T.D.A., Kadraka Appa Rao a Jatapu was identified and provided required material during 1991-92. He produced 620 mango grafts, 1600 seedlings, besides vegetable seedlings like brinjal, tomato, raddish, bendi and leafy vegetabes. He got gross income of Rs.9020/- during 1992-93 and net income of Rs.2020/-. At present the beneficiary has 600 cashew seedlings for sale.

5. In Boddamkharja village of Parvathipuram I.T.D.A. Mali Nageswara Rao a 10th failed Jatapu man was identified under satellite nursery programme. He was given training at H.N.T.C. Savarakatapadu. He produced 400 mango grafts, 2600 cashew seedlings and Rs.3000/- worth of vegetables.He got gross incomeof Rs.8580/-. This year the beneficiary has not started any pre-planting preparations for the nursery.

6. In Vegulawada village of Parvathipuram I.T.D.A., Sri Mandangi Adinarayana a handicapped Jatapu man taken up the nursery programme. He has planted 20 mango grafts for scion material and arranged pot drip irrigation for each plant. The system is found to be very good and effective and the plant growth is excellent. The Plants have attained the height of 4 to 5 feet within a period of ten months. 500 Mango grafts have come up successfully and further grafting of Mango sedlings is under progress.

   He had been trained at H.N.T.C., Savarakotapadu and also taken to CRIDA at Hyderabad which improved his knowledge and skill in grafting and other Horticultural techniques.

7. Sri Janni Prasada Rao, S/o Chinnaiah, a Konda Dora tribal youth was selected for raising nursery. But he was not given any training in H.N.T.C. and only with the guidence of concerned Horticulture Officer and Village Liaison Worker, started to raise the nursery in 2-00 acres of slopy land near the village. He is not having any permanent water source but a small hill stream near by his nursery. He is pot watering the nursery beds. All inputs were supplied to him by I.T.D.A. The Mango plants given for scion material are also good and healthy. A neat fencing was provided to the nursery. I.T.D.A. supplied material for Kamala. Banana. Pineapple, Mango Guva, silver oak and Teak etc. On the date of visit some 800

The following are some of the case studies of the satellite nursery farmers.

1. Sri Biddigi Mohan Rao, S/o Appala Swamy, a Jatapu tribal youth was given nursery in May, '92. He was imparted one month training in H.N.T.C., Seethampeta in various methods of nursery management. As a part of training he was taken to Rampachodavaram and Sangareddy for field knowledge. He raised Mango nursery in 0.20 acres. Inputs like implements, fertilizers, pesticides and parent material was supplied by I.T.D.A. Technical guidance was given by concerned Horticulture Officer. Varieties like 'Banganpalli' and 'Collector' were supplied to him. In total 3500 Mango grafts are available with him Scion material was purchased by him at 'Komara' village at the cost of Rs.0.25 per stick. There is no permanent water source for him as only a small hill stream is availabe near by the nursery. In summer the water shortage is acute and he resorted to pot watering to save the plants. Out of 3500 plants reported to have been grafted, only 2500 plants were availabe on the date of visit. The reasons for this heavy mortality attributed to lak of water in summer and cattle menace. He wants to sell the plants to I.T.D.A. at the rate of Rs.10-00 per plant, and by this he expects to get Rs.25,000/- from his nursery. He also stated that he will continue to grow the plants like Mango, Cashew, Kamala and coconut in future. He said he started the coconut nursery already, but some of the coconut seedlings were stolen away by some persons on the night of plantation of coconut seedlings.

2. In Killada Village of Seethampeta I.T.D.A., Sri Areka Mohan Rao, S/o Mukhalingam a Jatapu, was identified to take up satellite nursery programme during 1992-93. He was given technical training at H.N.T.C., Seethampeta for one month. The beneficiary was given agricultural implements, one bag of neem cake, one bag of B.H.C. 10%, one bag of Potash, and one litre endosulphan. He has produced 325 mango grafts, 20 Jack plants, 280 coconut plants and 100 Pineapple plants. The plant material is healthy and ready for distribution. The beneficiary is very enthusiastic and planning to graft 20,000 mango grafts this year and he has collected the required material like mango stones, polythene bags etc.

3. Sri Biddika Sankara Rao, S/o Vasantha, a Jatapu youth was given nursery in this year. He was given training for 3 months (Jan. '93 to March, '93) at Savarakotapadu H.N.T.C. and he has been taken to Hyderabad, Sangaeddy, Rajamundry and Guntur on study tour. I.T.D.A. has supplied all implements and inputs for raising the nursery. He started the nursery programme in May, '93. Mango, Cashew and M.F.P. species are the main plants in his nursery. He is having a good source of open well for water to supply to the nursery. But he is not having oil engine or electric motor to draw the water from the well. As a temporary measure he hired one oil engine from his relatives at Rs.150.00 for 3

months. The study team informed about the case and the Project Officer agreed to supply it very soon. A good begining was made by him and the team members felt happy by seeing his nursery. He has provided a very good fencing. He has already sown 15000 mango stones of local variety by purchasing them at a rate of Rs.70-00 per 1000 Cashew (3000) also sown on the date of visit. By seeing the preparations and work at this nursery the team members got a strong belief that this should be succesful story in the near future. The farmer is very enthusiastic to raise the nursery.

4. In Kanasingi village of Parvathipuram I.T.D.A., Kadraka Appa Rao a Jatapu was identified and provided required material during 1991-92. He produced 620 mango grafts, 1600 seedlings, besides vegetable seedlings like brinjal, tomato, raddish, bendi and leafy vegetabes. He got gross income of Rs.9020/- during 1992-93 and net income of Rs.2020/-. At present the beneficiary has 600 cashew seedlings for sale.

5. In Boddamkharja village of Parvathipuram I.T.D.A. Mali Nageswara Rao a 10th failed Jatapu man was identified under satellite nursery programme. He was given training at H.N.T.C. Savarakatapadu. He produced 400 mango grafts, 2600 cashew seedlings and Rs.3000/- worth of vegetables.He got gross incomeof Rs.8580/-. This year the beneficiary has not started any pre-planting preparations for the nursery.

6. In Vegulawada village of Parvathipuram I.T.D.A., Sri Mandangi Adinarayana a handicapped Jatapu man taken up the nursery programme. He has planted 20 mango grafts for scion material and arranged pot drip irrigation for each plant. The system is found to be very good and effective and the plant growth is excellent. The Plants have attained the height of 4 to 5 feet within a period of ten months. 500 Mango grafts have come up successfully and further grafting of Mango sedlings is under progress.

   He had been trained at H.N.T.C., Savarakotapadu and also taken to CRIDA at Hyderabad which improved his knowledge and skill in grafting and other Horticultural techniques.

7. Sri Janni Prasada Rao, S/o Chinnaiah, a Konda Dora tribal youth was selected for raising nursery. But he was not given any training in H.N.T.C. and only with the guidence of concerned Horticulture Officer and Village Liaison Worker, started to raise the nursery in 2-00 acres of slopy land near the village. He is not having any permanent water source but a small hill stream near by his nursery. He is pot watering the nursery beds. All inputs were supplied to him by I.T.D.A. The Mango plants given for scion material are also good and healthy. A neat fencing was provided to the nursery. I.T.D.A. supplied material for Kamala. Banana. Pineapple, Mango Guva, silver oak and Teak etc. On the date of visit some 800

Kamala plants were seen in polythene bags. During the discussions with this enthusiastic young man he stated that some 30 Kamala plants died due to hot weather lost month. Immediately he purchased those 30 plants from his relative and replanted them. It shows his dedication and hard work towards the nursery. He also sown the silver oak and Teak Seed on the beds. He also planned to raise 2000 jack fruit plants in near future. But there is no permanent water source for him. The nursery may yield a good success story in near future but for the irrigation facility.

9. In Goddugonlametta of Paderu I.T.D.A., Sri B. Simhachalam was identified to takeup Satellite Nursery Programme. Another 3 units of Satellite Nurseries have been given to 3 members of his family. For each unit of satellite nursery, 15 Mango grafts, 50 Pomogranates and 250 Pine apple suckers were provided. 80% of Mango grafts died while 80% Pomogranates have survived. Pine apple is infested with pest and the plot is full of weeds. The beneficiaries completely neglected the nurseries. Simahachalam, the first beneficiary is a liaison worker and due to his liaison work he has not paid any attention to his nursery.

PLANTATION PROGRAMME:

In terms of overall economic feasibility of the project Horticulture Plantation is an important programme, as the expected longrun incremental returns are very high. As mentioned earlier, 1992-93 is the first year for the programme. Approximately 10% of the total area to be covered under the project is targeted for the year. In terms of area and number of plants, as can be seen from Annexure-IV there is over achievement. Unlike other programmes the number of beneficiaries is very high in the scheme. The area of operation is also not of a single stretch creating challenge to extension personnel. The success of the programme very much, therefore varies naturally from beneficiary to beneficiary as the scheme involves many agronomic and maintenance processes. Due to the above dimensions process evaluation through PRA and sample informant approach may not reveal the entire picture properly. However, we tried to capture a snap shot type of evaluation through limited indications to provide corrective signals for 93-94, followed by general opinion collected in study villages. The key indications are given in table-7. In view of the methodlogy adopted aggregation has become a problem as there are variations in the success or failure stories from beneficiary to beneficiary and from specie to specie as well as from ITDA to ITDA. A separate study on random sample basis is required for arriving at the estimates of such variations. The information on key indicators, reveal that motivation meetings took place in all the sample villages in Seethampeta as programmed. Paderu area lags behind others with 33 percent coverage. Delays in completion of soil conservation works resulted in plantation scheme over runs in almost all the ITDAs. The position in Parvathipuram with 75% of villages reporting that they have "mostly" planted the trees on "treated" Podu lands is a solace.

TABLE 7 :KEY INDICATIONS OF PROCESS EVALUATION OF HORTICULTURE PREOGRAMME

Sample percent of villages

I.T.D.A.	Motivation Meetings Conducted	Areas Treated with S.C. Measure	Selection or Acceptability of Species by Tribals	On Farm Training	Timely Delivary of Inputs		Satisfactory Agronomic Practices			General Condition of Plantation Type		of Plantation		Farmer Enthusiasm (Sustenance)	Inter Cropping
					Fert. etc.	Plant Material	Pits & Spacing	Fences or Tree Gaurds	Weeding	Mono	Mixed	Good	Avg.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seethampet (5)	100	40	80	80	40	80	60	20	20	--	100	40	60	40	80
P' Puram(8)	50	75	63	100	38	63	60	75	40.	67	33	60	40	60	40
Paderu (13)	33	50	63	85	85	65	71	14	42	--	100	39	71	70	63
R.C. Varam (7)	57	30	43	43	71	71	57	85	43	14	86	33	67	60	71
All (33)	52	50	61	79	68	68	64	45	38	19	71	43	57	64	62

In contrast in R.C.varam and Seethampeta ITDAs tribals reported that in large number of fields (60 to 80%) Horticulture programme overran the soil conservation programme. In all the ITDA's in more than two thirds of the villages, excepting Rampachodvaram, the species of fruit plants are either selected by the tribals or accepted by them when the functionaries explained the need or technical reason for raising such species. In regard to on-farm training of benecifiaries to be imparted by VLW's and ACs, there is a good indication, ofcourse excepting Rampachodavaram, where most of the tribals were already exposed to the training programmes under social forestry scheme.

Timely delivery of plant materials, fertilisers and pesticides is a crucial process besides drawing heavily its inputs (with reference to the farmer) from the HNTC support and satellite nursery programme. Although mid programme corrections by purchasing the material from outside took place in respect of banana and pineapple there were reported delays in case of mango grafts, guava layers, etc. In some of the villages of Seethampeta and Parvathipuram excepting basal dosages no fertilisers or plant protection chemicals were supplied. It might be due to lack of proper and stronger linkage with Girijan Co-operative Corporation in these areas.

In as many as 64% of villages the tribals reported that they have followed instructions of extension personel in digging the pits with appropriate spacing and filling the pits with Farm Yard, Manure. Inter ITDA deviations are insignificant in this respect signaling the out come of technology dialogues and training. Cattle menace especially during winter and summer seasons is a serious problem in all the ITDAs. Erection of fencing or tree guards or both was programmed for this purpose. The tribals were paid labour costs for this purpose as they can collect the fencing material like weeds or bamboo reeds from the near by forest. Barring Seethampeta and Paderu, most of the villages reported that they have erected the same as planned, although most of them would not stand the cattle 'force'. As is the natural habit of tribals, weeding in the plantation fields was reported in few (38%) places only.

The Appraisal Report of the project envisaged mixed plantation. However, keeping in view the signals received during the initial meetings, the restriction is relaxerd by the project authorities. In the AWFP, 92-93 it was envisaged that measures to raise the mixed plantation by motivating the farmer should be continued but not to be imposed. It was also thought that during gap filling stage, the tribal may be inclined to accept the proposal, if he/she did not agree at the first time. Although in many cases, tribals choose the part of the mix remaining was accepted by them as a compromise. Excepting in Parvathipuram and R.C.Varam, all the ITDAs. implemented the mixed plantation programme on a large scale.

General condition of the plantations raised, as expressed by the tribals as well as witnessed in a few sample cases, is not so good. Only 43% of cases that too limited to certain species it can be considered good. There are vide variations in the survival rates as discussed earlier. The mortality, as stated by tribal and VLWs was very high during the summer.

Encouraging the tribals to do inter cropping in the plantation with traditional mix of crops or improved varieties is one of the caveats of implementation of Horticultural programme to ensure that the tribals won't create or establish new podu areas, to meet their food security needs. More than 63% of Villages reported that they raised inter crops, that too traditional ones in their plantation lands. The exception is Parvathipuram. In a few cases in Paderu area Sun Flower which is an alien crop can also be seen, where as in Rampachodavaram improved variety of blackgram is raised, seeds being supplied by the ITDA functionaries

Dependency syndrome of ITDA on outside states for technologically superior and new variieties continues to be the problem especially in Seethampeta and Paderu ITDAs. Similarly mass procurement of these items lead to distributional and transportation problems within ITDAs. Kew variety of pine apple was found to be superior to the local "Simhachalam" variety. With an intention to introduce this variety on a large scale in Seethampeta ITDA, where the tribals are raising the later variety for the last ten years, procurement was done from Kerala state. Although this motive for technology intervention is laudable, the outcome suffered due to the failure in working out the logistics in advance. For example in Puthikavalasa village of Seethampeta, I.T.D.A., the team observed that large heaps of Pine Apple plant material procured from Kerala State. Most of them are slips and crown suckers which require more gestation period for fruit yielding than the suckers. As they were dumped on the road side, they were exposed to hot weather and stray cattle. There is no continuous supervision in the supply and people were lifting whatever material they wanted. Similar is the case with Banana in Paderu. Hill banana (Mukhri) variety grown mostly in Seethampeta area, fetches high price and consequent returns to the farmer. The ITDA functionaries thought that by introducing the variety in Paderu on a large scale, the incomes can be raised manifold within a period of three years. The transfer of technology in this case is from one Project area to other "exchange of technology". But in their enthusiasim to bring quick and higher incomes to the tribals, the project management, could not envisage the technicalities involved in selection of material and transportation and distribution logistics. Due to massive nature of the programme involvement of non-technical persons became an imperative. The outcome partly jeopardised the laudable motive. In Sankidigondi village of Munchingput Mandal of Paderu I.T.D.A., the plant material was dumped at Sujanapeta a road side village which is 4 Kms. away from

the target village. The villagers received inferior material of Pine apple and banana. Due to lack of supervision in supply, it was reported that people from roadside villages have taken away some plant material denying the supply to the target groups living in the interior villages. The other disadvantage arising out of the procurement of plant material in large quantities is smuggling of inferior quality of plant material by the suppliers which, however, was noticed and rejected in many cases by the project staff. Even then the Deputy Director (Hort.) from the Project Co-ordination unit found sizeable proportion of plant material of inferior quality especially in Banana and Pineapple.

The above stated short comings or leakages resulted in some cases mismatch between the figures furnished by the liaison workers and the information provided by the villagers. However the variation was not much in many villages. For example in Laxmipuram village of Paderu I.T.D.A.,Sri Boyinaguda was given 200 Banana Suckkers, and on verification 250 was written in the record. Nine Hundred and Fifty pineapple suckers reached the same beneficiary against 1,000 reported in the records or planned.

Scheme integration is the major problem found in almost all the ITDAs. Horticulture activity was not taken up in areas where soil conservation works were taken up. For example in Jayanthikota village of Paderu I.T.D.A., the soil conservation work was taken up during November 1991 and completed by January, 1992 covering 10 Hect. of area by stone terracing. But the plantation programme was taken up in '92-93 in other areas where soil conservation was not done. However, this phenomenon was mostly seen in early plantations while rectification process started during later period of 1992-93.

Monitoring of various preparation activities to be undertaken in pre-plantation stage is not followed by the functionaries in some cases. It was informed that in many cases the extension agency did not verify the pit digging activity, removal of water suckers and sowing of the seed in the pit. For instance in Gadigujji village of Seethampeta I.T.D.A., the horticulture staff did not give initially any guidence but supplied the pine apple and banana suckers informing the tribals that they would visit later. The beneficiaries planted the material as they like once the functionaries failed to appear on the promised day. Then arrived the horticulture staff who removed the plants and replanted them causing damage to some plants. Ofcourse the rectification resulted in good survival rates.

Maintenance of plantation through watch and ward activities is a must in the programme. In many cases it was found that weeding was not done resulting in the growth of weeds covering even the plant dissipating the effect of chemical fertilisers. Tress pass by cattle, sheep and goats and wild animals remained a menace in many

cases. Encouraging traditional inter cropping resulted in a peculiar problem in atleast some villages. Tribals generally raise 'Sarava' tuber in the podu fields, which attracts the wild boar. The boars dig out few tubers and take away. But as part of inter cropping activity, when the tubers were raised by tribals in the pine apple plantation, the pine apple plants got trampled by the wild boars in their tuber searching and digging activity. A specific case of this type is reported as one of the reasons for low survival rates in Vadabandiguda village of Seethampeta. During inter cultivation, the roots of the plants got spoiled due to ploughing very close to the plants in some plantations taken up in dry lands. In Palem village of Rampachodavaram I.T.D.A., the cashew plants are being eaten away by the goats by pushing the tree guards aside. In Jalubuguda another village of Seethampeta I.T.D.A., the Pine apple plants especially new variety which have no thorny leaves unlike Simhachalam variety are grazed by the cattle from neighbouring villages. Tribals requested the team for establishment of Bandilidoddi (cattle pound) to keep the stray cattle and leave them only after payment of fine by the owner. The Project Officer started this activity to reduce the menace of cattle in some villages. After hearing about it, the tribals are enthusiastic to start the 'Bandilidoddi'.

Enthusiasm of the farmers increased tremendously due to motivation meetings trainings and introduction of new varieties. For instance, in Dabbagaruvu of Paderu ITDA, where banana plants were supplied, tribals procured themselves from the local sources to fill the gap without waiting for extension staff to start the activity. In Kanasingi Village of Parvathipuram where the study team provokingly asked the tribals whether they under take new plantation on their own with their own money coupled with small subsidy from the ITDA, all the tribals surprisingly responded positively. In Jallubuguda Village of Seethampeta one Tribal youth , Sankararao who kept quite all the while during the meeting in the village requested the study team to provide him with mango grafts which were supplied to others. He expressed that he was ready to purchase them from ITDA, ofcourse, in small number as the grafts supplied by the ITDA were very good.

The horticultural programme has also envisaged loan component from G.C.C. However, it was found in the field that this linkage is yet to be established as the lending by financial institutions has not been encouraging.

Marketing of the horticulture produce needs a fresh thinking. In I.T.D.A. areas especially in Seethampeta and Rampachodavaram where cashew plantation was taken up on a large scale in the last decade under Social Forestry Scheme and I.T.D.A. action plans. The trees have started yielding. Large quantities of cashew nuts have started coming into the market. In Rampachodavaram area the G.C.C. procured the cashew nuts during 1991-92 @ Rs.27/- per Kg. However, during '92-93 the G.C.C. did not enter the market. The merchants initially paid Rs.30/- per Kg. but suddenly lowered

the rate to Rs.19/- per Kg. in many places and even to Rs.12/- per Kg. in some interior villages. The tribal farmers had no alternative than to make a distress sale. It is therefore, necessary to organise the market for the tribal produce. Otherwise, the initial enthusiasm for horticulture crops may not be there if their kinsmen continue to make distress sales. Same is the case with vegetable growers especially the Malis of Paderu I.T.D.A., area who are traditional vegetable growers and they are now entering slowly into commercial market in a big way. In Seethampeta most of the villagers expressed doubts about the prices they can get for the kew variety of pineapple. The local market conditions are not conducive for large scale plantation.

ARABLE CROP DEVELOPMENT:

The arable crop development programme is basically aimed at bringing improvements in crop yields. Three scenaria were envisaged in appraisal report to arrive at the appropriate strategies. The farming pattern according the sceravia consists of (i) Only podu cultivation, (ii) podu plus dry land cultivation, (iii) Podu plus dryland plus limited wet land cultivation.

Undertaking soil conservation measures coupled with inter cropping in podu lands, where Horticulture plantations are planned, is to be encouraged with training in agronomic practices and where ever feasible and acceptable to farmers with supply of improved seeds etc. This aspect is discussed in the previous section and chapter. Besides converting as much dry land into wet cultivation as possible to improve the cropping intensity, through creation of irrigation facilities, credit support and introduction of new technologies along with appropriate agronomic practices was found necessary.

The interventions envisaged are (i) GCC support for credit. Wherever necessary, (ii) establishment of farmers seed production sites, (iii) Organisation of demonstration plots to dessiminate new technologies and improved practices. Adaptive trials to be carried out by Andhra Pradesh Agricultural University through its research centres located in the area is expected to provide necessary research inputs into the programme. The study has focussed its attention more on performance of seed production sites as research part is covered by Consultant Advisory Group constituted by the Government and their report is being submitted.

Research and Soil Conservation inputs for improvement of yields in podu patches:

This programme, eventhough, implemented in several places did not result in reaching the desired goal for various reasons. First and foremost reason is the non availability of improved varieties for podu crops which are basically food crops for the tribals. In the research centres of A.P.A.U. located in the I.F.A.D. areas, the research work on podu crops has just begun and will take at least three years of experimentation in the research stations followed by trials in the fields of tribal farmers.

The research activity for transfer of technology from lab to land needs to be strengthened. On the other hand, considering the importance of podu crops in the tribal diatary patterns, it is desirable that the research should concentrate on possibilities of increasing the productivity of podu crops as the podu cultivation is not going to disappear very soon.

The other aspect to be seen is that the increase in productivity from podu land through an integrated approach of Soil Conservation, horticulture or improved agriculture will slowly result in arresting expansion of podu areas. In this context, the team is happy to note that a beginning has been made in research on podu crops in research stations of Chintapalli in Visakhapatnam district and Pandirimamidi in East Godavari district. The most important problem faced here, however is that the research centres are having only two or three research scientists as the other posts are vacant continuously for long periods. Therefore, a special review has to be made by A.P.A.U. to see that research activity relevant for tribal development is taken up on full scale.

FARMERS' SEED PRODUCTION SITES:

It is one of the most successful programmes implemented first time in the ITDAs. Under the programme it is envisaged that the project staff identify relatively progressive and motivated farmer to undertake seed production of improved varieties so that with the demonstration effect the tribal farmers readily accept the improved seed and associated technology and agronomic practices. The following steps constitute the process of the programme.

a) Identification of relatively progressive farmers and motivation.

b) Identification of appropriate site for seed production plot with necessary land margins, irrigation (whereever necessary) and other infrastructure.

c) Training to the farmers in agronomic practices etc. wherever required.

d) Selection of appropriate variety of seed.

e) Supply of foundation seed, fertilisers, pesticides etc.

f) Close supervision and monitoring of crop condition and crop husbandry practices followed.

g) Yield level and quality assessment.

h) Purchase the seed, if the quality is acceptable. In case of failure, payment of risk charges, if all the other conditions are satisfied.

i) Allow the tribals of the same village or neighbouring villages who witnessed the yield potential to exchange with the local seed of the same or through some barter or cash arrangements.

j) Procure and sell the surplus seeds through GCC or other wise to the farmers in other villages.

Out of the ten steps listed above, it is observed that for all the crops in all the ITDAs the first six were followed very meticulously, which resulted in excellent yield levels when compared to the local varieties the tribals were raising hither to. The project monitoring staff and technical functionaries conducted crop cutting experiments for assessing the yield levels. The yields as reported by the study sample farmers are high by 200-400% (twice, thrice or four times) indicating the efforts of agricultural consultants and officers. The demonstration effect is also evident from the fact that in the PRA exercise undertaken in some of the sample villages the tribals were asking the team members to select them as one of the seed production farmers. Most of them are found to be willing to purchase seed also.

Excepting in the case of one village, the seed is found to possess the necessary qualities also, as reported by the seed production farmers, who started raising nursery beds during the current season. In the exceptional village (Thadipai of Seethampeta ITDA) also the quality was partially affected due to unseasonal rains when the (paddy) crop was cut and laid in the field for initial drainage (pana). Better testing methods may be required to assess the actual quality of the seed, as rogues are found here and there.

The impact of the programme, however is not so good due to gaps in the follow up action as envisaged in the later steps, from the ITDA officials as well as GCC. Some of the examples cited below amplifies the successes of the programme and failures in follow up action.

In Kundada and Kanivada villages of Rampachodavaram I.T.D.A. and P.Likkidi Village of Parvathipuram due to lack of follow up action on the part of village Liaison Worker and Agricultural consultant, the tribal farmers who organized seed production sites have consumed the output of the crop. However, all the farmers preserved the seed required for their own cultivation for the next season.

In Kosingabadhara, the seed is still lying un-exchanged and the Project Officer, I.T.D.A., Parvathipuram on the feed back from the team has decided to organise the seed exchange programme

In Thadipai village of Seethampeta I.T.D.A. also, three farmers were given C.R. 260 - T T variety of paddy under seed production sites programme to arrest the Galmidge menace and improve yield rates. On an average, they got 20 bags of yield

in an extent of one acre. In the same village four more farmers were given paddy (Swarna Masuri) to tackle the stem borer problem and improve yields and they got an average yield of 18 bags per acre. Of them, only two exchanged 10% of the seed produced with the local variety and the rest is still lying un-exchanged. They reported that unseasonal rains affected the quality of seed slightly. In a few villages the G.C.C. has organised purchase of part of the seed from these centres for distribution to other farmers as part of the short term agricultural operation loaning programme. In Boddamkharja village of I.T.D.A. Parvathipuram, few farmers were provided groundnut and sunflower under seed production sites programme The team could contact only one beneficiary who got 15 bags of Groundnut and 2 bags of sunflower. The G.C.C. has purchased only groundnut seed @ Rs.8-50 per Kg. However, the sunflower seed was to be sold to private trader @ Rs.4-00 per Kg. as the G.C.C., officials who promised that they will purchase @ Rs.7-00 per Kg. initially, failed to turnup.

In the I.F.A.D. Programme, there is no provision surprisingly for follow up action in the field of agriculture. Therefore, it is necessary to integrate the schemes of I.T.D.A. and lending programme of G.C.C. to take up programmes such as supply of seed, fertilisers, implements, plough bullocks, etc., for taking up improved agriculture in the lands developed through soil conservation and also in the areas where irrigation was provided under I.F.A.D. Programme.

COMMUNITY PARTICIPATION AND WOMEN DEVELOPMENT

To increase the food security and living standards through a strategy that improves community management of human and natural resources in sustainable way, participatory method of community development and management is observed to be the suitable approach. The primary focus of the model is on generating awareness amongst the tribal communities of how to improve and utilize local natural and human resources by initiating new organisational techniques and embedding them in the existing informal tribal community organisations.

The programme content envisages three interacting types of structures, village development committee and women societies with option to involve locally acceptable and experienced Non Governmental Organisations(NGO) whenever feasible and available.

Modes of people's participation in different ITDAs in various types of conservation and construction activities as well as economic development and extension activities were already described in the preceding chapters. In this chapter, we focus our attention to women societies. Intune with the philosophy behind the programme no targets are fixed in the AWFPs.

WOMEN SOCIETIES OR MAHILA SANGAMS OR MANDALIS:

Women Society is a kind of voluntary organisation mainly intended to cause necessary initiation towards forming the habit of thrift which is conspicuously absent in the value and cultural system of tribals and is also expected to induce self help and group help mechanism. Because of the fact that women occupies an important position in the tribal economy as well as value system, the women societies are construed as levers for bringing in necessary attitudinal changes in the tribal society. Besides, empowering women with knowledge, through appropriate communication, is often observed to result in better health and hygiene conditions apart from improvement in education and nutritional standards which are the imperatives for Human Resources Development (HRD). In a nut shell women organisations are conceived to act as catalysts in community decision process to ensure self-sustenance, household food security and family welfare designed in its larger perspective. Although thrift is the first stage activity followed by loaning, at a latter stage, the thrift societies can act as peoples banks ushering group lending and finally amalgamated into VDC activities for village, community and area development programmes.

A Community Development Coordination unit was proposed to be set up at each ITDA to facilitate initiation of participatory development and management process in

the Project area. Intially the programme in some I.T.D.As did not take off as envisaged, since the (women)Community Development Coordinator's post could not be filled in the zero year itself, for want of suitable and willing candidates to work in tribal areas. However, the activities picked up momentum during 1992-93 after recruitment of W.C.D.Cs. and initial sensitization of Project Officers and Staff by the supervisory mission.

Women Development Societies are being formed in all most all the villages unlike as envisaged in the Appraisal Report. So far by March, 1993, five hundred sixty six societies are formed mobilising savings to the tune of four and half lakh rupees. The societies were free to frame their own rules of lending, recovery, interest rate etc. According to project authorities, some of the Mahila Sanghams started imposing penalties on arrack (alcohol) drinkers, entry or local sales tax on private vendors/ purchasers to mobilise more financial resources for their societies. Tribal women also started undertaking community nurseries, vegetable cultivation, construction of buildings, irrigation structures, Soil Conservation structures or works as part of income generating activities. On the social side, the women groups have made appreciable efforts to control brewing and consumption of liquor by menfolk and have begun a silent revolution with a view to saving their families from the evils of arrack hazards, indebtedness and exploitation. In some villages enthusiastic women groups have under taken the responsibility of monitoring educational activities like attendance of pupils, teachers etc.,

THE PROCESSES ENVISAGED

The Appraisal Report envisaged five stages or dialogues for community development initialisation which can be translated into the following vital processes.

DIALOGUE No:	PURPOSE / ACTIVITY	TIME SCHEDULE
I	Informal meetings to raise awareness of tribals to identification of problems, needs and resources, and to introduce project philosophy	4 months
II	Exercises to build self esteem, to bring in awareness of exploitative elements and ways etc.	6 months
III	Training sessions on how to save and avail credit etc. Role of women in exhorting the men folk and society, to build up self sustenance in food security etc. (Training in Social Extension methods through self help and mutual help mechanism). Formation of Thrift and	

	Credit groups of Mahila (Women) Societies.	6 months
IV	Initiation of Community Projects with labour contribution and matching material grants from the project. Formation of special purpose groups etc., where ever required to take up construction and M.F.P. processing activities, Marketing and Live stock production, Operation of Thrift and Credit activities.	6 months
V	Initiation for long term development activities, Starting of Grain Banks.	After two years of commencement

As mentioned in Chapter-III this important activity did not start in the zero year of every village or Micro Watershed. Its integration with other activities was done at later period. In the Appraisal Report itself, the integration is not cited explicitely in the Chapters concerning Natural Resource Development. However, signals of achievements are clear in implementation, inspite of late start. Similarly skipping of the stages II & III, especially the Training Programmes and exchange sessions, affected the consistancy elements of the programme.

THRIFT SOCIETIES AND GRAIN BANKS

Organisation of Thrift Societies or groups has been part of the women welfare activity of Government for quite some time in these areas. Under the schemes like DWACRA of IRDP and ICDS of World Bank also, funds were sanctioned to the women groups for taking up income generating activities and also as matching grants to Thrift Groups. In both the cases, it was a one time affair and the scheme implementation mostly stoped immediately after the sanctioning stage itself. A departure is made from this approach in APTDP, although hangovers from past appeared here and there at the initial period prior to the appointment of WCDC took place. It is a pleasent sight to see the Women Coordinators being welcomed affectionately by the tribal women and through out the PRA discussions on the subject, the tribal women were mentioning the excellent motivation provided by these young Women Development Coordinators.

Evaluation of Women Development and Participation interms of key stage achievements is attempted here. It may be noted that in view of the time constraints and consequently the approach adopted investigation is limited to few villages only. The sample size especially in Paderu, ITDA is very meager. Albeit, the emerging

indications are expected to provide a bird's eye view of different types of participant responsiveness and initiatives to the Project interventions. As mentioned earlier and apropos to the philosophy of Participatory Development, no specific pattern of attitudes governing the modus operandi is envisaged. The indicators evolved for process evaluation are summarised below.

Sl.No.	Key process	Indicator		Explanation
		Aggregate	Spread	
1.	Motivation and Mobilisation	Representation or coverage membership as percent to the total households in the village	Percentage distribution of societies indicating ranges of coverage	The Appraisal report (APPR) after assuming the average size of the village as 50 House holds envisaged that atleast 25 house holds or 50 percent of women in the village join together and start a society at the end of 16 months after commencement of the project.
2.	Commencement of Thrift activity and quantity of savings.	Percent of societies initiated Thrift activity and average amount of Thrift per society.	Percentage distribution of societies according to per capita thrift ranges	The APPR envisaged regular saving of Rs.5/- per member at the initial stages to be stepped up to Rs.10/- after some time. Daily saving is found to be not feasible in the area. Cash income accrues to the tribals during October to May only. Assuming 50 percent of the time

				is spent on collection of forest produce and other house hold duties and 1/4th of the cash incomes can only be saved with out jeopardising the house hold food security, Rs.175/- is considered by the study team as per capita threshold for initial saving incidence per year.
3.	Commencement of loaning operations to meet house hold needs and emergency requirements	a. percent of societies that commenced loaing activities. b. per capita loan amount distributed for house hold requirements.	a. Distribution of societies according to percent of loanees. b. Loan utilisation pattern.	Expected to signal the stage achievement and indicates incidence of need and equality process.
4.	Repayment and rotation of loans	Percentage of Thrift Societies.		Sustainability signal.
5.	Initialisation of community activities for income generation and selfreliance.	a. Percent of societies started or undertaken works and other programmes meant for the village. b. Percent of villages/societies that started grain bank.		Appraisal report envisaged this process as a commencement and operationalisation of fifth stage incidcating a take off phase towards long term economic and social development.

The information received through informal discussions followed by verification of savings Bank pass Books and other records wherever maintained is compiled and presented in the form of indicators described above in Table.8. The information presented in Table.8: reveals that motivation of women members to form into a society is successfully done in all the ITDAs although with reference to coverage of entire community there are variations. Average membership coverage of house holds for the sample villages varied from 90% in Seethampeta to 20% in R.C.varam. In other words, if there are 100 house holds in a typical village, 90 women started or joined the society in Seethampeta. The distribution of societies according to the enrolment coverage is also attempted. The Appraisal Report envisaged at least 50% enrolment (participation). Excepting in R.C.varam, this objective or norm is fullfilled in all ITDAs. In R.C.Varam instead of women societies large number of men societies were formed at the initial stages. In all such villages after recruitment of WCDC women societies are formed.

All the societies started thrift activity. The average amount of savings per Thrift society is very high in Parvathipuram and Paderu at around Rs.4900/- and almost half of it in R.C.Varam and Seethampeta. Per capita thrift varied between Rs.87/- in R.C.Varam to Rs.163/- , average for the project area being around Rs.125/-. As explained earlier if Rs.175/- is construed as threshold point for per capita thrift of a society, more than 30% of the societies crosssed the stage.

Credit or loaning is the next stage activity. More than 50% of the societies in each ITDA reached this stage. The per capita loan availed per house hold activites including farm inputs, is comparetively very high with Rs.833/- in Parvathipuram and low in R.C.Varam. The average credit deposit(saving only, excluding ITDA contribution) ratios are 3.18 for Seethampeta 6.40 for Parvathipuram, 1.23 for Paderu and 1.56 for R.C.Varam.

The coverage of loaning activity among members picked up in Seethampeta and Parvathipuram leaving aside Paderu where even in the tiny sample it is observed that all the members in all the societies availed the facility. R.C.Varam presents a different indication with as many as 34% of societies having distributed loans to more than 50% of their members, although per person thrift and per loanee amounts are small. Looking it through another angle the Thrift and Credit activity and promotion of Mahila Societies is proceeding in a systematic manner in Rampachodavaram, while in the other ITDAs the processes are varying from society to society.

Taking up of community activities by Mahila Societies is the first phase of fifth stage of community development process. The activity could be a Check dam, School building, Satellite Nursery etc. Besides, specific emphasis is given here for organising a Grain Bank. Excepting in Parvathipuram Grain Banks are organised by 40% of the

TABLE - 8 : PROCESS EVALUATION INDICATIONS OF COMMUNITY / WOMEN PARTICIPATION PROGRAMME

ITDA	Coverage of Community (in %) (Members/No. of HHs in Village)					Commencement of Thrift Activity					Status of Loaning Activity		Activities			Community Activities in % of Societies	
	Aggregate	Below 25	25-50	50 and above	Aggregate in % of total Societies	Average Thrift		% Distribution of Societies the Range of percapita thrift			% of Societies started	Per Capita (Rs.) Loan availed for HH Activity	Coverage of Activity in % of Households			Devp. Activity	Grain Banks
						Per society (In Rs.)	per person (In Rs.)	Below Rs. 175	Rs.175-350	Rs.350 & above			Below 25	25-50	50 & above		
S' Peta	90	--	--	100	100	2418	106	80	20	--	60	337	67	33	--	20	40
P' Puram	62	--	50	50	100	4809	130	75	--	25	75	833	50	50	--	50	--
Paderu	30	--	--	100	100	4905	163	50	50	--	50	200	--	--	100	50	50
R.C. Varam	26	55	12	33	100	2100	87	66	22	12	66	136	50	16	34	11	44

sample societies in Seethampeta (40%) and in R.C.Varam(44%). With reference to the community activities, although in many works programmes, labour participation of women is reported, 50% of women societies in Parvathipuram, 20% in Seethampeta and 11% in R.C.Varam have taken up development works, mostly construction activities.

In some societies the members identified the need for Check dams and requested the ITDAs for sanctioning the schemes. Special Purpose Groups were formed and started executing the works.. Some of the schemes or works, especially, buildings sanctioned under programmes like Operation Black Board, sponsored by United Kingdom, Integrated Child Development programme (ICDS), assisted by UNICEF are also taken up by these societies. In Parvathipuram and Seethampet, Sattelite Nurseries and Vegetable Gardens were reported to be started in few areas. Since the study teams purposively avoided most of the villages visited by Supervisory Mission and other teams like Maharashtra, Delegation headed by Hon'ble Minister of Rural Development, Government of Maharashtra, Monitoring and Evaluation Teams from other IFAD assisted projects in India, etc., a large number of success stories in that area could not be captured in the current sample.

Besides the incidence of loaning activity and its coverage one of the terminal indicators for assessing the impact of thrift and credit programme is the utilisation pattern of the borrowed amounts by the loanees. Although the sample of loanees is thin an attempt is made to search for appropriate impact signals as shown below

TABLE:9

PERCENTAGE DISTRIBUTION OF UTILISATION OF LOAN AMOUNT

S.NO.	EXPENDITURE ITEM	S'PETA	P'PURAM	PADERU	R.C.VARAM
1.	Food items	7	5	--	25
2.	Ceremonies and Festivals	--	14	--	43
3.	Medicines etc.	--	5	--	9
	SUBTOTAL (I)	7	24	--	77
4.	Farm in puts incl. wages	--	45	63	5
5.	Farm Assets (Land, Plough Bullocks etc.)	52	--	--	4
6.	Business Investment (Working / Fixed Capital)	21	--	--	7
	SUB TOTAL (II)	73	45	63	16

7. Group lending (Advances taken by groups for carrying the works/ creation of community assets)	20	31	37	7
TOTAL	100	100	100	100

From the above table, it is evident that more than 3/4 th of the loan amount is utilised towards consumption expenditure in R.C.Varam, as envisaged in the Appraisal Report whereas only about seven percent of the loan amount is going towards consumption expenditure in Seethampeta and nil in Paderu. In constrast more than 2/ 3 of loan is going towards investment in Seethampeta and Paderu which are expected to create a multiplier effect and increase the house hold incomes apart from releiving them from the dependency on private money lender. Group lending activities which is peoples' lending to Government operations here for temporary period, are significant in Seethampeta, Parvathipuram and Paderu.

The scenaria depicted above signals mixed but positive pattern of impact of the programmes. On the whole it may be construed that the community/women development programme took of well, although there are few cases of leakages and slippages. The main task is how to consolidate the achivement and bring about sustainability of the programme, or else like many programmes in the past, the enthusiasm will subside. Case specific observations are presented in the following paras.

SEETHAMPETA I.T.D.A:

In Jalubuguda, a Savara Village, Thrift Society was initiated by 11 Women about a year back. It was revealed that, when the Women Community Development Coordinator whose mother tongue is Telugu visited the village first time she could not communicate properly with to the women due to language barrier. But a Jatapu women of neighbouring village who knew Telugu came to her rescue. Slowly the interaction increased and savings from members also accumulated to an extent of Rs.2,500/-. There was no fixed pattern in the contributions and periods of contribution. The members informed that as and when each house hold got cash income they were contributing. The savings, however, were deposited in the Bank at the end of every month. ITDA contributed (Bank deposit) Rs.5,000/- in two instalments. Part of the savings amounts so raised was given as loan to three households for purchasing wet land in a nearby village. The remaining amount was rotated as loans among members for petty requirements, not exceeding Rs.100/- at a time. The three tribals who took loans when questioned about their repayment activity replied that they will repay the

entire amount with interest after the first harvest itself, Habit of formation of regular meeting and discussions need to be taken up in the village.

In Thadipai a mixed ethnic village with Savaras and Jatapus two independent Mahila Societies were organised. Although the study team did not go into details, it is informed that they have saved so far Rs.6,000/- and are utilising the amount for purchase of fertilisers etc. In contrast, Gadigujji with 23 Jatapu and 15 Savara households, a single thrift society was formed 8 months back with 30 members drawing members from both the communities. They have saved Rs.4,500/-. Grant of Rs.10,000/- in two instalments was given by the ITDA, out of which Rs.2,000/- is just given to one of the members towards working capital in petty business. The Villagers are yet to decide about the interest rate to be levied and loaning programme.

The Mahila Society of the Village started a Grain Bank also and collected five bags of Paddy from the relatively rich house holds ITDA provided matching quantity of five bags through GCC. The members issued two bags already as grain loans at 50 percent interest, i.e. the loanees are to repay 3 bags within six months or immediately after the harvest.

Twenty persons of the Mettumeediguda, one women from each house hold, started a society about 10 months back. Savings were, however, started after principal harvest months that is November and December of 1992 which is also the starting period for MFP collections. The members saved an amount of Rs.2,400/-, and are now planning to avail the loans during the current agricultural season towards purchase of fertilisers, seeds etc. Similar is the case in Vadabandiguda where a society was formed with twenty members, thirteen from the same habitat and seven from neighbouring habitat of the same tribe, Savaras.

A Mahila Society was organised in Marripadu Village with 33 members about a year back. The Society organised a special purpose (Tribal community) group to undertake construction of a check dam in their village. They identified the need, as they were utilising the water from that Stream in a crude way by placing huze stones across, at many places. The estimated cost of checkdam is one lakh rupees. Rs.35,000/- was already spent. The society is maintaining registers about details of wages paid, material received and utilised. The members of the society saved an amount of Rs.1,890/- and the ITDA provided Rs.1,700/- as matching grant out of which Rs.2,000/- was issued as loan towards daily wages to the leader of TCG to be paid to the participants in the construction activity. The recovery is to be made when ITDA releases the money. Besides few members of the society utilised the loan facility for agricultural operation and consumption needs.

PARVATHIPURAM I.T.D.A:

All the 82 Jatapu households in Vegulawada village formed into a thrift society and mobilised Rs.8,000/- as savings with in a period of one year. ITDA has provided Rs.16,000/- as matching grant which was deposited in Visakha Grameena Bank, Bhadragiri. Rs.5,000/- were distributed as loans towards agriculture inputs during the last season one thousand rupees were temporarily advanced towards wages in construction of Anganwadi Building and School Building which were taken up by the Mahila Society. The Anganwadi Building was sanctioned under Integrated Child Development Scheme (ICDS) sponsored by UNICEF while the School Building comes under Operation Black Board scheme (OBBS) assisted by United Kingdom. The quality is assessed by Engineering Personnel of the team and found good.

Gunada is a pure Jatapu Village with 33 house holds. A Mahila Society was organised with 27 members. The savings accumulated being Rs.3,350/- the society received a matching grant of Rs.6,000/-. Five members availed loans mostly for agricultural purpose whereas one member has taken Rs.500/- from the society to perform her daughters "Puberty" function at an interest rate of 36 percent.

The Women group has taken up the construction of Village School Building sanctioned under U.K. assisted Operation Black Board Scheme (OBBS). The estimated cost of the Building is Rs.76,000/-. Roofing (cement concrete) and walls are completed. Plastering work is held up for want of cement. Assuming 75 percent of the estimated cost is towards cement and metal etc, the Women Society members are expected to get Rs.19,000/- towards their income generation actrivity apart from self confidence. The quality of the work is also found to be good.

There are 70 households in T.K.Jammu comprising 6 Savaras and 64 Jatapus But females of 19 house holds only formed into a society. Their regular monthly savings accumulated to Rs.6,887 by March, 1993. The society decided to charge an interest of 24 percent, per annum and the loaning operations are expected to begin.

In Udayapuram also members from 20 House holds out of 53 households in the village, started a women society in February, 92. By December, 92 they have saved Rs.1,000/- and the ITDA gave Rs.2,000/- as matching grant. The same was availed as loans by six families. The loans were utilised to meet the food consumption needs, towards ceremonies, functions and medical expenses.

In Kanasingi Village consisting of 63 Jatapu house holds a thrift society is said to have been formed. But excepting the President and Secretary no women is aware of the activities of the society. Without any savings, the ITDA sanctioned Rs.5,000/-.

In another village by name Boddamkharja inhabited mostly by Konda Dora Tribe and other tribes Jatapus along with non-tribal families, similar case is observed, but in a different fashion. The Society was formed and President and Secretary were elected: The ITDA without waiting for the formation of savings habit, sanctioned Rs.5,000/- as grant. The President of the society has drawn the entire amount as loan to her self without informing the other members. She, being educated, created a neat and fictious record in the registers with thumb impressions of some illiterate persons, as if the loans were distributed to them. However, during the followup visits of WCDC, the entire, episode came to light when the question of recoveries started.

There is a Youth (Men) Association in the village which under took many development activities in the village without any contribution from the Government. But they are not aware of the activities of the Women Society established under the Project. Infact one of the members of the Youth Association took up the above cited case and investigated the matter, when his wife was shown as a defaulter to Thrift Society. The matter, however, is settled when the President confessed her guilt before the Villagers and agreed to pay the money in monthly instalments. The Youth organisation is reviving the society now.

On enquiry with the functionaries who accompanied the team, it was revealed that, apart from initial misunderstandings and hangover from similar programmes implemented in the past, in the absence of WCDC the thrift activities in about 10 Villages were assumed to be monitored by a local educated tribal youth who established a tiny voluntary organisation with the main intention of literacy improvement. After securing a salaried job, the youth left the village, causing a set back for some time to the NGO movement as well as the Thrift programme of the Project.

PADERU ITDA:

Gamparai is a road side village inhabited mostly by Valmiki and Konda Dora Tribes. There are 300 families in the village. Being a relatively big village, it has all the infrastructural facilities. After coming to know about the Women Societies in the remote villages accessable from Gamparai, some of the Women requested the WCDC to allow them to start similar activity. Two societies were formed as per their wish. The study team attended one of the meetings of the society, which has a member ship of 40. They have collected at the rate of Rs.10/- per month per member for 22 months and deposited an amount of Rs.8,000/-. ITDA contributed initially Rs.11,200/- as matching grant. Loans were availed by all the members to the tune of Rs.8,000/-. As a group the society invested Rs.4,776/- towards purchase of unprocessed Tamarind at the rate of Rs.3 per kg. After processing it (deseeding etc), the society sold it for Rs.10,300/-, getting a benefit of Rs.5,524/- with in a span of one month.

The members revealed that most of them originally thought it is yet another "Mahila Mandalis" as was established under ICDS Project or other previous schemes like DWACRA. But later on, they came to know not only about its philosophy but also the processes of the programme. They informed the study team that the activities of the previous schemes like tailoring, stitching of Adda leaf plates ceased with in few months after starting. They are currently engaged in construction of community centre, exclusively for the women, although ITDA is very much reluctant to add another building in that village. They have started a Grain Bank also in the village. Each member contributed 16 kgs of Paddy which is stored in the house of the President. They are yet to distribute it as loan to the needy. The society decided that 100 percent per annum will be collected as interest. There is no contribution from the ITDA. The members are now feeling the storage problem with the onset of monsoon.

Although it is a relatively a rich village with lot of awareness and Valmikis being one of the most enterprising people in this area, the team felt that empowerment of women should not be limited to remote villages only.

The study team visited a branch of Tribal Community Development Society located at Hukumpet. This society is a NGO operated by educated Non-tribal youth. ITDA has provided assistance to this organisation from the funds earmarked under Andhra Pradesh Tribal Development Project, towards encouragement of NGO activities.

Apart from awareness raising, peoples' movement activities, the society is involved for imparting various types of trainings in income generation activities particularly M.F.P. processing. In the branch visited by the study team, 70 Women from six neighbouring villages are under going training in Adda leaf plate making. Six resource persons, four educated tribal women and two non-tribals, are imparting the training. The training period is stated to be for a period of two months. The stipend paid is Rs.12/- to the tribal trainee per day. The organisation is entering into a supply contract with Tirumala Tirupathi Devasthanam for supply of Adda leaf plants. Adda leaf, a MFP is in plenty in this area and constitutes one of the Major MFP collections of tribals being sold to GCC in leaf form. Apart from the above said training, the trainees are taught alphabets (in local language) and numerals as a part of literacy improvement among women. The trainees are exuding confidence.

In Palamamidi Village Mahila Society was organised by the Anganwadi supervisor (of ICDS Project). There are 50 House holds in the village comprising of 40 Khond and 10 Konda Dora families. Twenty House holds joined the Thrift club. As on 24-6-93, they have collected Rs.1,010/-. The ITDA is yet to provide matching grant and naturally no loaning process started.

RAMPACHODAVARAM ITDA:

Ramannavalasa is an interior village 7 kms from the main road connecting Maredumilli with Rampachodavaram. There are 64 House holds comprising of Konda Reddys and Konda Kapus. Intially in the absence of WCDC, the Agricultural Consultants and Liason worker of GCC organised a Men's Thrift Society with 37 members. The Villagers received labour charges for their participation in Forest coup operations and Government sponsored Housing Programme. Part of the receipts were contributed to the society as savings amounting to Rs.4,000/-. As on December, 92 an amount of Rs.11,286/- was saved by the Men's Society. Assuming it as a Tribals contribution to Village Development Fund, the ITDA sanctioned Rs.22,472/- in about four installments. About 47 house holds of the Village (Members as well as non-members) took loans amounting to Rs.21,419 during the last two years, at an interest rate of 30 percent per annum.

Most of the members are paying the interest promptly either after the principal harvest period or during MFP collection and sales season. The principal amount is not paid in few cases. A check dam contractor has taken an amount of Rs.5,000/- as loan from the society. He informed the team that after payment of final bills the loan was redeemed on 17-6-93 with interest. Similarly another two cases involving high amounts of loans ranging between Rs.2,000/- to 2,500/- are observed, one for purchasing Cart and Bullocks another for Oil Engine. Rest of the loans are of small amounts and are mostly utilised for agricultural operations (seeds and fertilisers) clothing and Medical expenses.

The Men's Society organised a Grain Bank initially by the efforts of GCC about two years back. 25 bags (each 75 kg) of Jowar and 30 bags of paddy were saved so far during the year. No loaning operations started during the year. Details of previous operations are not readily available.

A Women Society was organised in August, 92 in the same Village with a membership of 50 after recruitment of WCDC. By March, 93 an amount of Rs.4,300/- was saved and ITDA released the matching grant of Rs.8,600/-. So far 40 members availed loans (Rs.5,704/-). Twenty one members repaid the loans with interest, the rate being 30 percent per annum. Most of the loans were taken to meet food security needs, ceremonies and festival expenditure. An Anganwadi worker also took a loan of Rs.500/- to meet emergency Medical expenses of her female child. The Village Liason Worker took Rs.500/- from the Women Society and Rs.2,500/- from the Men Society towards the Oil Engine. He is yet to pay the Principle amount and the interest amount from March, 1993.

The Women Society identified the need to construct Check Dams on Velamala Kondavagu and Nugu Mamidivagu (Two Hill streams) and forwarded the proposal to the ITDA. Engeneering staff of ITDA visited the spots and recommended "Dry Rubble" check dams with Iron crates. The ayacut envisaged is 51 acres covering the lands of nine beneficiaries only. The estimated cost seems to be too high i.e. Rs.1,44,900/-. The labour component is only Rs.30,200/-, i.e.21 percent of the total cost. The works are entrusted to sub group of the Women Society and are to be carried out in 1993-94. There is a need to review the estimated cost. As it exceeds general norms of per acre investment although an element of conservation of lands from soil erosion which cannot be directly estimated, is involved.

In Kutravada also two thrift societies, by Men and Women were formed. There are 61 House holds in the Village. All the Male members of the house holds joined the society, while 50 Female members only constitute the Women Society.

The Women Society, collected Rs.500/- only as Savings, while the ITDA contributed Rs.1,000/-. One Male through his wife and two females availed loans from the Society. The Male member, a tribal contractor utilised the loan of Rs.1,000/- towards executing the Jawahar Rojgar Yojana (JRY) works programme and informed the study team that he would repay the loan after settlement of bills. Other two members spent the loan amount towards medical expenses.

In Turruru, relatively small habitat with 38 families of Konda Reddy and Konda Kapu tribes, a Woman Society was organised six months back mobilising all the females of the Village. Against their accumulated savings of Rs.1,500/-, ITDA contributed Rs.3,000/-. All the members availed loan facility to the tune of Rs.1,080/- during the recent tribal festival for purchase of clothes. The rate of interest agreed was 30 percent per annum.

Palem is an important but remote village. Many development works were executed in the Village previously under ITDA Action Plans. Out of 119 House holds, non-tribals constitute about 15 percent. Numerically dominant Tribe is Konda Reddy with 83 House holds. Only 22 house holds organised a Thrift Society, with savings of Rs.3,950/-. As usual the ITDA contributed double the amount as matching grant. Only five members took loans, amounting to Rs.3,400/-. The Society members took sympathy on a School Teacher, a Non-tribal and advanced Rs.3,000/- as emergency loan to meet the expenditure of his daughter's marriage about four months back. But so far no repayments are made by the teacher. The other four loanees are tribals and utilised the loans towards agricultural operations. The interesting feature here is that the society is charging an interest of 48 percent to the non-tribal teacher and 24 percent to the tribal members of the society.

A Grain Bank was started in the Village with 54 members. So far 22 bags (100 kgs) of Paddy was saved. ITDA gave the matching contribution. Loaning operations are expected to start in peak rainy season. Interest is decided as 25 percent per season.

Choppa Konda Gangavaram is another big Village with 118 households 65 male members and 20 female members organised separately two societies. The loans accumulated were Rs.3,550/- and Rs.1,750/- respectively. After the ITDA made the matching contributions loans were availed by 23 male members and 6 female members. An amount of Rs.3,200/- by 22 male members Rs.350/- by female members were taken as loan for agricultural operations mostly to meet the wage components. One male member took Rs.1,000/- towards payment of wages for road contract works allotted under Remote and Interior Area Development Programme (RIADP). While three female members utilised the loan for medical expenses. No repayments are made so far.

Kundada is another big village with 144 households inhabited by Konda Reddys, Koyas and Valmikis. Valmikis of the village initiated a women society with 14 members mobilising a saving of Rs.1,500/-, The ITDA is watching its progress to release the matching grant. Konda Reddys also started another Women Society with savings of Rs.435/- the study team could not contact the key persons for more details.

In Kanivada a very remote Konda Reddy Village, 61 men organised into a Thrift Society. They mobilised saving to the extent of Rs.3,050/-. ITDA as usual given the matching grant. Two persons borrowed loan amount of Rs.5,000/- at 12 percent rate of interest and utilised the amount for marriage and death ceremoney respectively. The Women Society is started just now with savings of Rs.420/-.

A Women Society with 15 members is formed recently in Bhimavaram Village which has 35 Konda Reddy families. The societies savings pass book showed an amount of Rs.2,550/- with Rs.1,700/- being the contribution from ITDA, the members savings is only Rs.850/-. One member of the society borrowed an amount of Rs.1,000/ - and performed his daughters marriage. The Mahila President also advanced an amount of Rs.1,000/- at 120 percent of rate of interest per annum to the President of Vetukuru a near by village leaving only a balance of Rs.550/- for their loaning operations. In both the cases of lending, other members are not informed about the loaning operations.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The Andhra Pradesh Tribal Development Project (APTDP) with an outlay of 779.74 millions Rupees and a Project period of seven years commenced from 1991-92. As the project completed two years of implementation, Commissioner, Tribal Welfare who is also the project coordinator of APTDP, requested the Tribal Cultural Research and Training Institute, (TCR&TI), Government of Andhra Pradesh, Hyderabad to conduct quick and critical evaluation of the process involved in the on-going project "so that experiences and lessons from the project implementation can be utilised for midcourse corrections and also build in these experiences into design of the second phase of the A.P.T.D.P proposed for the remaining five ITDA areas of the State".

A ten member team of experts was constituted by Director, TCR & TI., Hyderabad consiting of Anthropologists, Statisticians, Economists, Civil and design Engineers, and Horticulture scientists drawn from TCR & TI., Commissionerate of Tribal Welfare and Chief Engineer, Tribal Welfare. After a detailed review of the literature, the team started the field work. It has evolved and implemented a separate methodology to suit the multiple objectives and process evaluation frame work to be studied. It has three components namely:

a) Conducting group interviews with the help of a 'Check list'.

b) Collecting detailed case studies of some of the programmes and participants and;

c) Spot verification for key items/schemes for quality assessment.

This methodology not only enabled quick evaluation of the processes involved but also helped simultaneously an "in-depth" analysis of various dimensions of processes and interplay of various factors. The team on reaching ITDA headquarters was divided into three sub-teams and it was ensured in the process that each team is headed by a senior and experienced officer and supported by a research scholar from Tribal Cultural Research and Training Institute and a Civil Engineer from Office of the Chief Engineer (Tribal Welfare), Government of Andhra Pradesh, Hyderabad. The sectoral officers of ITDA helped as facilitators during study in their areas of operation. The survey was conducted from 15th to 27th June '93. Altogether 46 key villages were studied in detailed while 22 villages where related programmes were taken up were also visited. Only two villages per day were studied to facilitate a detailed study.

At the end of study in each ITDA, the Project Officer, ITDA and the officers concerned were given a feed back which helped in taking some immediate corrective steps. Similarly, the Commissioner, Tribal Welfare was also briefed about the important

findings which resulted in issuing of some executive instructions on urgent and important issues. During the course of discussions with Commissioner it was also seen that on some of the drawbacks/shortcomings already brought to her notice necessary action was taken. Therefore on some of the recommendations contained in this report action was already taken.

The following are the important findings and recommendations:

a) was found that some villages located in the 16 water sheds were not included in the project report itself due to various reasons. It is, therefore, recommended that all such villages be identified immediately and included in the project.

b) Similarly, some families and some areas, within the villages selected for programme implementation in the first two years were also left out of coverage. All such areas and such families should be selected and programmes relevant to area and people be implemented. In future, entire tribal population and area in the village should be covered to exploit total resources.

c) Selection of villages in the first year was done on the principle of 'ridge to valley' as envisaged in the project but the same principle does not seems to have been followed in some cases in the second year as, the villages "wherever there is good response" seems to have been favoured in this year. As this would affect the basic watershed approach to be followed in the project, it is recommended that the ridge to valley approach should be strictly followed.

2. **Zero Year:**

Just as the project has a zero year, each of the villages selected for programme implementation also have 'zero year' which is one year preceding the programme implementation year. For example, the programmes like motivation meetings, arranging satellite nurseries, training tribals in soil conservation etc have to be taken up one year or one season before the programme implementation. This is to be made known to all staff members.

3. **Motivation Meetings:**

The villages where programme has to be implemented should be selected one year in advance and during this zero year, motivation meetings should be conducted for raising awareness of the community to understand project philosophy and content. It was observed that these meetings were held at village level only in only 48% of the villages while they were held in 20% cases at focal points for a group of villages. In the remaining 32% of villages, meetings were held either partially or no meetings were held at all. Where meetings were held also, it was reported that it was mostly an explanation of the schemes by Project Officials

than detailed dialogue or discussion. There was also a problem of communication as some tribal groups like Savara, Khond etc speak a dialect of their own and could not follow the concepts explained in Telugu by officials in their own accent. Due to these reasons, the desired results like formation of Tribal community group on their own, selecting their own liaison worker didn't come. Therefore, it is recommended that

i) The Gramsabha should be conducted at the village level only. Local educated tribal or liaison worker could act as interpreter to clearly pass on the message.

ii) Atleast half a day should be spent in each village.

iii) The motivation team should consists of senior officers of I.T.D.A dealing with schemes;

iv) The Project Officer may attend as many meetings as possible;

v) The potentialities of the village and programmes to be taken up should be identified by the villagers. Those schemes should be examined by the officials from technical point of view and discussed with villagers to arrive at the programme for the village.

vi) In the meetings, there should be a dialogue between villagers and officials following P.R.A. approach.

vii) Educated men and women should be associated in planning for the village;

viii) In the process of discussion by villagers among themselves, the Tribal Community Group should be allowed to emerge on its own. The present practice of nomination of group by I.T.D.A. Official or organising the group by former contractors or vested interests may not be allowed to continue as real representative groups will not emerge from this approach.

ix) All the village Liaison Worker should be selected by the villagers only as on now only 58% of them in the sample villages have been selected by the villagers. The villagers can remove these workers if they are not satisfied. The Liaison Worker is meant for the entire range of activities to be taken up for the village by I.T.D.A. besides bringing the village issues to the notice of concerned officials but not for only certain schemes like horticulture as at present. This should be clarified. The honorarium of the Liaison Worker should be paid through the Tribal Community Group from out of scheme funds released to the village. Women liaison workers may also be selected to help organising tribal women.

4. CONSERVATION AND CONSTRUCTION ACTIVITIES:

a) Soil Conservation

Soil conservation works are proposed to be implemented only by using farmer's own labour for which they would be paid and village committee to which funds will be released and through which work is proposed to be executed will decide how much farmers would be paid and how the balance would be utilised. In practise this procedure was followed only in a few cases as only in 32% of cases the labour from the same village participated. Maximum non-tribal participation was seen in Rampachodavaram area. The work done in Paderu area is good and participation of tribals is high. Overall, the quality of work is good only in one third of sample villages. However, most of the works taken up by Village Development Committees were found to be good. The following are recommended.

i) The entire area to be treated for soil conservation should be identified with the help of tribals as they are able to inform clearly the works to be taken up hillock or hill range wise;

ii) The funds should be released only to the Tribal Community Groups (Village Development Committees) who would decide about wages, work etc;

iii) No labour or contractor should be imported from outside. Only tribal land owners should participate;

iv) The officials like sub-assistant should act only as facilitators but not as official 'Contractors'.

v) No soil conservation work should be taken up when standing crops are there in the field;

vi) The bunds should, as far as possible, be along the boundaries of tribal lands but they should not be laid in the middle of cultivated lands simply because they are on contour as they will be ploughed by tribals in the very next season. The need for consulting and involving the tribals therefore becomes all the more necessary.

vii) The list of lands proposed to be treated during the year should be given to Horticulture and agricultural officers so that they can plan their programme to be taken up in the subsequent year in these lands. The budget and programme to be taken up in a village should be mode known to the villagers in advance.

viii) The soil conservation should be taken up in the entire area. If upper slopes of the hills fall in the reserve forest area and degraded they should also be taken up in consultation with Forest Department along with the tribal lands on lower hill slope. Otherwise, the work done in lower slopes may be washed away, and;

ix) Soil conservation is being done on present podu lands only. It should also be done on the podu lands left fallow in the cycle so that the entire podu area gets treated. Otherwise atleast 2/3 of the podu lands (as only one out of three patches is under podu cultivation at any time) will be left untreated.

b) **Small Scale Irrigation:**

The concept of people's participation in planning and execution of the irrigation schemes is being insisted upon in the field of irrigation as the contractors coming from outside in earlier years had only an eye on the profits from the works and therefore, the quality of works suffered Sometimes the location was wrong and in some other places, labour was imported from outside. Only in 61% of the sample schemes, motivation meetings were conducted. Prevalence of employing outside contractors and entrusting works to them was observed in 47% percent of the cases in the project area and high in Paderu and Rampachodavaram while in 100% cases in Seethampeta and 78% cases in Parvathipuram, the works were entrusted to tribals only, (especially women). The works done by tribals were found to be of superior quality. Given the necessary guidance they would do better. In view of this the, following procedure is recommended.

i) Involvement of tribals at planning and execution stage. No outside contractors should be allowed.

ii) Releasing of funds to the Village Development Committee or women thrift groups and wages may be paid by them as per their own systems such as exchange of labour etc;

iii) Advance supply of materials;

iv) Training of the ayacut dars in construction and maintenance of structure.

v) Maintenance of catchment area, field channels (desilting operations) and ayacut development and;

vi) Timely and continuous guidance by the engineers.

5. ECONOMIC DEVELOPMENT AND EXTENSION ACTIVITIES

a) **Horticulture development**

Horticulture development basically in Podu area is expected to increase income from these otherwise uneconomical agriculture. But Podu being the traditional way of life provides food for tribal farmers. Therefore, leaving some areas for Podu seems to be inevitable for the present. As the incomes from the horticulture

increase and get stabilized, it will help complete shift. Otherwise, the dependence on market/ITDA for inputs, sale of output and purchase of food items becomes too much for a primitive economy under transition and the losses would be too heavy to bear. Plantation of Minor Forest Produce species is expected to replenish the dwindling potential and at the same time provide the much needed supplemental income for the subsistence economy. The success of horticulture programme depends on the Nursery and Training support and therefore, training in HNTC and organisation of nurseries by tribal farmers in areas near the proposed plantation was also planned. Even though horticulture has been under implementation and HNTC's are established in these areas for over a decade the horticulture programme by and large in the project areas continued to be a contingency programme. There is no correlation between plant production and plantation programmes especially in Banana and Pineapple.

The ITDA, Seethampeta started one more HNTC not far away from the existing one as the lands at the earlier HNTC. are alkaline in nature and unfit for plantations. One bore well was also dug at the first HNTC at a cost of Rs.40,000/- recently. This unnecessary expenditure would have been avoided if advance planning had been made. The training programmes and plant production programme also needed advance planning in all HNTC's. The following are the recommendations:

i) The existing HNTC at Panukuvalasa, Seethampeta ITDA may be used for Training purposes as infrastructure is already created;

ii) Infrastructure for training at HNTCs at Savarakotapadu, Kothavalasa, Padmapuram, Chintapalli and Sirigindalapadu should be created immediately;

iii) The Padmapuram farm should not be allowed to become a tourist place. It should continue as education and training centre for tribals;

iv) There should be perfect follow-up after training and the training itself should be undertaken well in advance keeping in view the programme requirements;

v) There should not be frequent transfers of officers incharge of HNTCs;

vi) Only trained tribal youth should be allotted satellite nurseries;

vii) Continuous guidance should be provided to farmers;

viii) Assured water supply, scion material and demand in the nearby area should be ensured for all satellite nurseries;

ix) Vegetable seedlings should also be introduced in the nurseries;

x) The earlier trainees should not be forgotten when programme is taken up in new areas. Otherwise, trained manpower would go waste;

xi) The plantation programme should be preceded by soil conservation programme in those areas;

xii) Timely delivery of plant material, and good quality is very important to reduce mortality. Correct quantity should also be ensured;

xiii) Spacing of pits, tree guards, guidance in maintenance of plants will help in better implementation of programme;

xiv) There should be advance planning for marketing of horticulture crops. Value addition activities should form part of this programme. Tribals should be made aware of the prevailing prices in the outside market through radio, meetings in weekly markets etc

b) **Arable crop Development**

The interventions envisaged are (1) Credit support through Girijan Co-operative Corporation (2) Establishment of seed production sites by tribal farmers and (3) Organisation of demonstration plots to disseminate knowledge of new technologies and improved practices. Adaptive research was proposed to be carried out by the research centres of Andhra Pradesh Agricultural University existing in these areas to provide necessary research inputs into the programme.

The research work on Podu crops has just begun in Chintapalli and Pandirimandi and therefore, it may take atleast three more years of experimentation before introduction. This activity should be strengthened as Podu crops will continue to form an important component of tribal diet and yield per acre should also increase so that their dependence on market and consequent exploitation reduces.

The seed production centres by tribal farmers is one of the most successful programmes implemented resulting in relatively very good yields and the demonstration effect was also very good as most of the tribals in the village were able to appreciate the good returns in the production centres. However, the desired effect of adoption of these high yielding varieties by the other tribals was not there in many cases as there is no follow-up like purchase of seed by ITDA or GCC for distribution or lack of exchange of seed among farmers due to failure of extension agencies like agriculture consultants and liaison workers. However, the seed production centre farmers preserved seed for themselves and most of them converted the remaining seed into rice for consumption.

It was also found that the officials have gone strictly by IFAD programme regarding agricultural development which does not provide for follow up programme. But they could have dovetailed it under ITDA or GCC programme. The "watertight compartment approach" in some cases or "matter of fact approach" followed in some other cases led to "failure" of the programme which, otherwise, would have been a very good success. It is, therefore, recommended that the follow-up action by integrating with ITDA or GCC programme should be taken up for achieving the desired goal.

6. COMMUNITY PARTICIPATION AND WOMEN DEVELOPMENT

Community participation (including women) in planning, implementation and maintenance of assets has been the main theme of the Project. The level of participation has been discussed in detail under various development heads. Here the women societies, their formation and functioning is only discussed.

The women societies were initially started as thrift groups and their scope can be expanded to cover whole gamut of activities ranging from nutrition, hygiene and child care to participation in community nurseries and construction activities. The Women Community Development Coordinators were recruited in 1992-93 to act as facilitators. Appreciable progress was achieved since then within a short period under this as follows;

i) Five hundred sixty societies called Sanghams were formed;

ii) Each of them were able to mobilize/women to save the money and deposit in the sangham;

iii) Some of them made efforts to control brewing of liquor and consumption of liquor;

iv) Some of them have even monitored the functioning of educational institutions, and

v) Some of them have taken up construction of Checkdams, irrigation tanks, school buildings, roads, Anganwadi buildings organised grain banks etc;

vi) The thrift group also lent loan to its members and dependence of money-lender decreased to that extent. Tribal Women in all the societies studied mentioned about the excellent motivation provided by the young Women Community Development Coordinators;

The consistency in growth and sustainability of the programme could not be ensured in all cases because of large scale expansion of programme within a short period. The much needed follow-up action in the form of guidance could not be

ensured to all societies equally as there is only one CDC for I.T.D.A. and therefore, better promising societies received better attention;

Secondly, because of lack of guidance, some of the thrift societies lent sizeable amounts out of savings to teachers, contractors, anganwadi workers etc which were not repaid. They were to be told to lend small loans to the needy only. Further, some of them who charged heavy interest of even 200% were to be advised to reduce the interest as other wise, they would not be different from private money-lenders. Except for some advises like this, the societies were given full freedom in their organisation. On the whole, it was a great movement that has started in the project areas and it is expected that substainable participation can be expected in the near future.

7. **GENERAL**

i) The general issues are about the integrated approach in planning and monitoring that is required at personnel and programme level as the Andhra Pradesh Tribal Development Project forms one component of the total development programmes taken up in tribal areas through ITDA. As this project is meant for tackling special problem in some identified areas, integration with the larger programme and availing of existing infrastructure is much more necessary and this would yield quick and better results. It is therefore recommended that Andhra Pradesh Tribal Development Project in each ITDA should form one component of action plan of ITDA for that year to ensure integration and also to avoid over lapping of programmes. For this purpose, mapping of all facilities and programmes has to be done which in turn will help in establishing programme/organisation linkages and filling the gaps in development programmes/institutions.

ii) The second important aspect is that only one or two programmes receive maximum attention while other programmes though related gets relegated to second or third place. This is also not in tune with the integrated approach required to be implemented and will result in lop-sided development.

iii) There is a very popular demand in all I.T.D.A's. by the tribals for providing housing programme. They are facing problem of availability of thatching grass and there is danger of fire accidents also. This may have to be implemented on a large scale which is not possible from the existing funding pattern of Government. Therefore, funds have to be provided from other sources.

ANNEXURE-I

LIST OF VILLAGES VISITED BY THE EVALUATION TEAM

S.No.	Name of the ITDA	Dates of Visit	Villages where detailed discussions were held	Other villages visited
1.	Seethampeta	17.6.'93	1. Vadabandiguda 2. Marripadu 3. Rajugadiguda 4. Guddumeediguda 5. Jalubuguda 6. Gadigujji	1. Pedabagga 2. Suggodiguda 3. Mettumeediguda 4. Benneduguda 5. Talada 6 Killada 7. Tadipai
2.	Parvathipuram	18.6.'93 to 19.6.93	1. Gunada 2. P. Likkidi 3. T.K. Jammu 4. Udayapuram 5. Vegulawada 6. Penguva 7. Kanasingi 8. Boddamkharja	1. Kosingabhadra 2. K. Sivada 3. Sikalabai
3.	Paderu	21.6.'93 to 23.6.93	1. Kantipuram 2. Maradaguda 3. Laxmipuram 4. Pedavalasa 5. Pedagangudi 6. Kamalabanda 7. Devuduvalasa 8. Pinakothuru 9. Pedakonda 10. Gorriloava 11. Kotagummam 12. Chinabandaveedhi	1. R.K. Nagar 2. Sadika 3. Darakonda 4. Goddugarlametta 5. Cheekumaddula 6. Murisiguda 7. Thuraiguda 8. Ranginivalasa 9. Kongapakalu 10. Hukumpeta 11. Gamparai

			13. Dabbagaruvu	
			14. Palamamidi	
			15. Mondikota	
			16. Jayanthikota	
			17. Sankidigondi	
			18. Thongikota	
			19. P. Kodapalli	
4.	Rampachoda varam	25.6.93 to 26.6.93	1. Torruru 2. Denduluru 3. Palem 4. Gangavaram 5. Akumamidikota 6. Jajivalasa 7. Bodlanka 8. Kanivada 9. Bhimavaram 10. Kundada 11. Kutrawada 12. Vetukuru	1. Ramannavalasa 2. Goramamidi
	Total		45	23

ANNEXURE - II

PHYSICAL TARGETS AND ACHIEVEMENTS UNDER SOIL CONSERVATION PROGRAMME

Sl.No.	Activity	Unit	Target		Achievement		Percentage	
			1992-93	1991-93	1992-93	1991-93	1992-93	1991-93
1.	Stone terracing	Hect	2005	3413	2270	3779	113	111.
2.	Graded bunding	Hect	3831	6092	2128	2998	55	49
3.	Bench Terracing	Hect	667	667	38	46	6	7
4.	Stone checks	Nos	1488	3493	304	602	20	17
5.	Rockfill dams	Nos	468	655	55	96	12	15
6.	Veg. barriers	Nos	100	100	68	68	68	68
7.	W.H.S. / Farm ponds	Nos	2	2	7	7	350	350
8.	Irr. Channels etc.	Mts	-	-	3198	3198	-	-

ANNEXURE - III

PHYSICAL TARGETS AND ACHIEVEMENTS UNDER SMALL SCALE IRRIGATION PROGRAMME

Sl.No.	Activity	Unit	Target		Achievement		Percentage	
			1992-93	1991-93	1992-93	1991-93	1992-93	1991-93
1.	Check dams	No.	87	135	41	64	47	47
2.	M.I. Tanks	No.	10	16	14	17	140	106
3.	C.I. Wells	No	20	20	4	4	20	20
4.	L.I. Schemes	No.	5	5	-	-	-	-
5.	Diversion structures	No.	15	15	20	20	-	133

ANNEXURE - IV

PHYSICAL TARGETS AND ACHIEVEMENTS UNDER HORTICULTURE AND ARABLE CROP DEVELOPMENT PROGRAMME

Sl.No.	Activity	Unit	Target		Achievement		Percentage	
			1992-93	1991-93	1992-93	1991-93	1992-93	1991-93
A.	**H.N.T.C. Support**							
1.	Irrigation	No	2	7	3	5	150	71
2.	Fencing	Mtrs	100	100	100	100	100	100
3.	Mist chamber/glass house	No.	1	1	-	-	-	-
B.	**Horticulture**							
1.	Area	Ha	3000	3000	4249	4249	142	142
2.	Beneficiaries	No	6179	6179	9651	9651	156	156
3.	Speciewise plants							
a.	Cashew	No	136	136	321	321	236	236
b.	Banana	No.	2947	2947	1045+	1045+	35	35
c.	Guava	No.	121	121	6+	6+	5	5
d.	Mango	No.	61	61	25+	25+	41+	41+
e.	Citrus	No.	116	116	16+	16+	14+	14+
f.	Pine Apple	No.	3709	3709	3261	3261	88	88
g.	Other fruit trees	No.	53	53	138	138	270	270
h.	Other Misc. trees	No.	695	695	1112	1112	160	160
	All		**7838**	**7838**	**5924+**	**5924+**	**76+**	**76+**
C.	**Extension**							
a.	Demoplots	No.	186	378	181	367	97	97
b.	Satellite Nurseries	No.	310	630	216	242	70	38
c.	Seed Productions sites	No.	260	516	393	498	151	97

ANNEXURE - V

MAJOR PROCESSES FOR THE IMPLEMENTATION OF FARMER'S SATELLITE NURSERY PROGRAMME

PROCESS	PARTICIPATION AND DECISION BY WHOM ?	WHERE ?	WHEN ?
1. Arriving at tentatively type of species required for plantations and area.	Tribals and Project functionaries	Initial motivation Meetings or followup Meetings for identifying Soil Conservation and SSI Schemes	Zero year or first year or for the selected Micro Water-sheds and Villages
2. Arriving at number of Satellite Nurseries required to produce the plant material keeping in view. a) Area norm given in the Appraisal Report (0.5 ha) b) how much each farmer can produce c) Net expected return to the farmer treating for a while the expected expenditure on root stock, measures and fertilisers & labour as variable costs and gross returns at the proposed price at which ITDA/ Tribals purchases the plant material produced.	Project functionaries	Staff Meetings at ITDA	Zero year or first year
3. Selection of farmer and site with a) Suitable soils b) Irrigation c) Tree shade (partly)	Project functionaries, tribals of the village and Liaison Worker	Follow up Meetings and Motivation exercises	Zero year or first year

d) approach road
e) accesability to scion material, etc. from HNTCs or established quality orchards in the vicinity

4. Training to farmers and study tours	Selected Satellite Nursery farmers and functionaries	HNTCs, Krishi Vignana Kendras of APAU and Fruit Research Farms in the state & outside. Established private and Govt. Nurseries, etc.	Zero year or first year
5. Land preparation and fencing	Satellite Nursery farmer under the guidance of VLW, AC & Horticulture Officer.	Selected Site	First year
6. Supply or collection of root stock organic manures, fertilisers, P.P. chemicals, equipment and other mateirals like polythene bags	Trial farmer and project functionaries	Local area and Project office	First year
7. Monitoring of germination corrective measures etc.	Tribal farmer and VLW, AC, Horticultural Officer	Selected site	First year
8. Supply or collection of Socio material graftings etc.	Tribal farmer, VLW, Horticultural Officer	Selected site	First year or Second year
9. Production of plant material monitoring of survival rates seggregation etc.	Treibal farmer, VLW AC, Horticultural Officer	Selected site	Second year
10. Purchase and transport of plantation material and allotment to villages or areas	Project functionaries	Selected site and proposed planatation areas	Second/Third year

ANNEXURE - VI

COMMUNITY DEVELOPMENT–THRIFT & CREDIT SOCIEITIES

S.No.	Name of the I.T.D.A.	No. of Thrift & Credit Societies	Members	Member's contribution	Matching Grant (I.T.D.A.) (savings)
1.	Seethampeta	131	2,620	2,40,996	1,00,142
2.	Parvathipuram	108	3,030	2,44,015	4,84,826
3.	Paderu	242	12,100	1,35,402	66,521
4.	Rampachodavaram	97	3,397	1,92,435	3,22,732
	TOTAL	578	27,147	8,12,848	9,74,221

Printed at The Co-op. Press Ltd. ✆ 232581