

INTER STATE TASAR PROJECT

REPORT ON A FIELD SURVEY

Chandrapur District  
Maharashtra

INSTITUTE OF SOCIAL STUDIES TRUST

NEW DELHI

1982

## Table of Contents

	<u>Pages</u>
Acknowledgements	1
<b>I</b> Introduction	2
The Project	2
Administration of the Project	3
Main features of the Project	4
Aims of the Study	5
Methodology	6
<b>II</b> The Programme	8
Previous efforts at Tasar development, Khadi and Village Industries Board, Development Corporation of Vidarbha	8
Inter State Tasar Project Nurseries and Plantations Forests and tasar rearing	11
Inputs: seed cocoons Inputs: credit Marketing: cocoon purchases Extension services etc	
Impact on income of rearers/ weavers-wages	30

	<u>Pages</u>
<b>III The People</b>	<b>35</b>
<b>The Dhimars</b>	<b>35</b>
<b>Tasar: an occupation</b>	<b>36</b>
<b>Rituals and taboos</b>	<b>44</b>
<b>Socio-cultural factors and Tasar     Development Programmes</b>	<b>48</b>
<b>Perceptions</b>	<b>51</b>
<b>The rearers' point of view</b>	
<b>Inter-caste perceptions</b>	
<b>Non-rearers perceptions</b>	
<i>Traditional interaction and cooperation         within the Dhimar Community.</i>	<b>56</b>
<b>IV Putting the two together</b>	<b>75</b>
<b>V Summary of Findings and Policy Implications</b>	<b>86</b>
<b>Consistency with Culture</b>	<b>86</b>
<b>The Arjun Plantation</b>	<b>87</b>
<b>Dependence on Ain Trees</b>	<b>90</b>
<b>Other Inputs</b>	<b>93</b>
<b>The dependence on agriculture and     fish and its relevance to the     tasar development programme</b>	<b>96</b>
<b>Institutional framework</b>	<b>99</b>
<b>Monitoring and Replication</b>	<b>108</b>
<b>Some general suggestions for ISTP</b>	<b>118</b>
<b>References</b>	<b>124</b>

## List of Tables & Charts

Table 1	Achievements of the DCVL's Tasar Silk Programmes.	62
Table 2	Rearer's views and perceptions of linked Institutions/Schemes.	63
Table 3	Production and value of cocoons purchased by the DCVL from the Vidharba Region: Measure of fluctuations in total and per capita quantities.	64
Table 4	Alternative scenarios of the event of a 20% rise in the weaving charges for unprocessed Tasar ghicha cloth from Rs 5 per metre to Rs 6 per metre.	65
Table 5	Villages, number of Shimar households surveyed - across the land classes.	66
Table 6	Number of households and population in the sample by land classes.	67
Table 7	Average family size across land classes.	68
Table 8	Percentage distribution of workers according to land and activity for the sample households.	69
Table 9	Proportion of workers by age and sex within each activity and land class.	70
Table 10	Average number of days spent on a specific gainful activity in a year by the sample households.	71
Table 11	Average hours spent in Tasar rearing season.	72
Table 12	Average monthly income from selected occupation by land classes.	73
Table 13	Sex-specific number of literates and illiterates among the sample population by land classes.	74
Charts:		
	Chart showing tasks within rearing and division of labour.	41

## Acknowledgement

This study has been possible, thanks to the active involvement of the Development Corporation of Vidharba Limited.

We are grateful to the field staff and in particular to the General Manager of the tasar department, Mr A.K. Mulherkar and his colleagues messers Aranke and Bijagare for having spared their time and knowledge and providing full help and cooperation in our field work.

Ms Chitkala Lutoni, Chief Project Officer, ISIP has encouraged us by always being interested in our field reports and facilitating our search for information. Our immense gratitude to her.

Three voluntary organisations, Chetana Vikash, Gopuri; Maharogi Sewa Samiti, Warora and Gram Vikas Sewa Mandal, Mul, facilitated our field survey. We are grateful to all of them particularly to Mohreshwar Madlakondawar of Gram Vikas Sewa Mandal, who assisted with the field survey alongwith four other local field investigators.

Swapna Mukhopadhyay of the Institute of Economic Growth, Krishna Mahapatra and K.J. Geetha of Delhi University provided invaluable guidance.

From the Institute, Malika Viridi took the primary responsibility for field survey and report preparation supported by A. Suchitra and Shobna Jaishankar.

We learnt a great deal on the administration of development projects especially in relation to tribals from the study - and are grateful to the Swiss Development Corporation for inviting us to do the study.

SIC

(Devaki Jain)

14.2.82

## I

## Introduction

1-1  
TAE  
PAC/STC

An Inter-State project for the production of tasar silk is to be implemented during the VI th Five Year Plan period: 1980-81 to 1984-85. This project involves an outlay of Rs. 10.50 crores and will cover the tribal belt in the seven states of Uttar Pradesh, Madhya Pradesh, Bihar, Orissa, West Bengal, Maharashtra and Andhra Pradesh. The project aims at helping the tribal rearers of the tasar silkworm to carry out their operations in a systematic and scientific way, thereby not only providing a sound base for the industry but also raising the income of the individual rearer from the present Rs. 400/- per year (in a season of two months of rearing) to Rs. 2000 per year. The project is to cover 6000 rearing families and in addition will provide employment and additional income to a number of reelers and processors of the silk yarn.

Specifically, 6000 traditional rearers are to be selected, each of whom will be allotted a hectare of land planted with Arjun. The work of planting these 6000 hectares to Arjun has already begun. During the third year of the project, that is, in 1983-1984, the plants grown this year (1981-82) will be ready to receive the silk worms. Each selected rearer will be given disease free layings which he will rear on the trees standing on his one hectare of land.

The target population of rearers in each state is as under:

1. Bihar	1500	rearers
2. Uttar Pradesh	1000	"
3. Orissa	1000	"
4. Madhya Pradesh	1000	"
5. Maharashtra	500	"
6. West Bengal	500	"
7. Andhra Pradesh	500	"

The hectareage to be taken under Arjun plantation is also as above, at one hectare per rearer.

The requirement of silk worm seed for this project, @ 450 DFLs (disease free layings) per rearer per year, is 27,00,000 DFLs. These DFLs will be supplied to the rearers by seed rearers. The requirement of the seed rearers will be 2,70,000 DFLs. These DFLs will be prepared at 7 pilot project centres to be established, one in each State.

The project, at the end of the 5th year is to yield an additional 1 lakh kg. of silk every year. At present the production of tassar silk in the country is 4 lakh kg.

The project also envisages the setting up of seven reeling units, one in each State, to consume at least a part of the cocoons produced. These will be training-cum-production centres and will use improved reeling machines designed by the Central Tassar Research & Training Institute, Ranchi.

The investment of Rs.10.50 crores will yield, from the 5th year onwards, tassar cocoons valued at Rs.1092 crores and in terms of raw silk about one lakh kg. valued at Rs.2.5 crores and spun silk yarn 38,500 kg valued at Rs.48.5 lakhs (approx.). A tribal family will realise Rs.2000/- per annum for two months of rearing work.

## 1.2 Administration of the project

The project is administered by the Central Silk Board, through the Chief Project Officer. At the State level, the project is administered by State Government agencies, such as the Development Corporation of Vidarbha Ltd. In Maharashtra project funds are placed with these State Government agencies by the Central Silk Board for the implementation of the project. At the State level, the State Government agencies/departments are responsible for the implementation of the project and the project staff is under their administrative control.

In Maharashtra, the Development Corporation of Vidarbha, a Government of Maharashtra undertaking, has been associated with tassar silk

development for the past few years. The Corporation has therefore been entrusted with this project for that state. The Corporation has selected sites in the Shandara and Chandrapur Districts of Vidarbha for the plantation and are to select rearers from villages around this area as the beneficiaries. These are to be traditional rearers who are already rearing silkworms in this area. The target allotted to Maharashtra is 500 hectares.

### 1.3 Main features of ISR:

Intensive field project consists of nurseries of arjun trees, maintenance of arjun <sup>PLANTATIONS</sup> nurseries for two years, pilot project centres for disease free basic seeds, cold storate, - 1 for each State; grainage - 1 for every 500 rearers for disease free commercial seeds, door to door extension and administration of project.

Development of marketing facilities, including establishment of market, establishment of warehouse facilities, operation of price stabilization scheme.

Development of tasar reeling including one training-cum-production centre of reeling for each State to cover 300 reelers; and training of functionaries in India and abroad.

The Institute of Social Studies Trust was invited by the Swiss Development Corporation to carry out a short and a quick baseline survey of a small population of tribals in Maharashtra.



1.4  
AIMS  
OF  
STUDY

5  
The basic aim of the survey would be to identify ways and means by which the ISTR could improve the living conditions of the tribal population, through the tasar development programme as also to improve the overall implementation and impact of the project.

In order to do this it was further specified that the Institute would probe some of the following questions:

- 1 Whether tasar production as an activity is sensitive to tribal culture and what way - positive or negative.
- 2 Whether tasar production is best suited for stimulating the progress of the tribal population especially the weakest among them.
- 3 Whether such an activity especially the new arjun plantation would protect the integrity of the eco-system within which the tribals operate.
4. Whether the self-reliance, if any, of the tribals would be replaced by systems of dependency, by the new project, and
- 5 finally whether the particular design of the programme would in any way further distort distributive justice by exaggerating disparities amongst tribals whether on the basis of class, sex or geographical location.

THE 1.5  
METHODOLOGY\*

Responding to the request, the Institute had discussions with the Chief Project Officer, the Swiss Development Corporation as well as the implementing agency namely the Development Corporation of Vidarbha Ltd.(DCVL) Nagpur on selection of site for the study. Brahmpuri and Garchiroli tehsils were recommended as the most appropriate sites not only because they already have fairly active participation in tasar rearing but also because Arjun plantations were coming up in these two tehsils.

The DCVL had already surveyed and prepared lists of all rearers in the project site. It was found that the majority of them especially in these two tehsils, were Dhimars - who seem to be a border-line social group between tribes and the castes.

The DCVL also had a list of all the Dhimar rearers in the villages. From this list 100 Dhimar households belonging to eight villages, stratified according to land owned were selected for detailed household survey.

Five visits were made to the district in the six month period of the study November 1, 1981 to April 30, 1982. The first was an informal visit in which a few local agencies were identified, some villages and rearers' households visited. The second included discussions with DCVL, visits to some of the project sites and centres as well as identification of households for survey and a pre-test of the questionnaire. The third visit was for actual household survey which included the training of Marathi-speaking associates of the collaborating agency. The fourth visit was to canvass the schedules in two villages as well as check the field work done by the collaborating agency. During the fifth visit tentative findings and recommendations were discussed with officials of the DCVL including the Managing Director, site level functionaries as well as rearers.

---

\* Details in Appendix 1.

In sum the methodology used for the field work consisted of basic research under guidance of selected scholars from the Delhi University and the Jawaharlal Nehru University; data collection from site through household survey; discussions with individuals as well as groups of "beneficiaries", discussions with functionaries as well as discussions with the Chief Project Officer as well as ~~as well as~~ supplied the Institute with all the relevant reports as well as information.

## II

The Programme

1. Before reviewing the working of the Inter State Tasar Project (ISTP) in Chandrapur/Bhandara, it will be useful to recall briefly the history of organised efforts at tasar development in this area prior to the introduction of ISTP in 1981.

Previous efforts at Tasar developmentKhadi & Village Industries Board

2. Tasar (or Kosa) cultivation has been a traditional activity in Chandrapur/Bhandara districts of Maharashtra. Estimated 3500 rearers had been on their own until 1966-67 when the Maharashtra State Khadi & Village Industries Board (MSKVIB) stepped into the area as the first development agency to provide organised support to this traditional industry. MSKVIB set up field centres with technical and other staff and facilities such as grainage, reeling/winding equipment and undertook procurement of cocoons. It also undertook marketing of tasar yarn and woven fabrics.

MSKVIB had hardly worked in the area for about six years when the State Government asked it to withdraw from the field and hand over all its centres/staff/stocks relating to tasar development in Chandrapur and Bhandara to the DCVL. The reason for this step apparently was MSKVIB's poor performance which in turn was due to its many diversified activities and remote control over the field centres in Chandrapur and Bhandara exercised from its headquarters at Bombay.

Development Corporation of Vidarbha

However, the DCVL to whom the activities were transferred did not have any previous experience of tasar development or

any other development work of this nature involving large numbers of rural households, spread over hundreds of village and lacking in literacy. DCVL had been engaged mainly in running industrial projects and assisting urban entrepreneurs. Its activities were as diversified, if not more, as that of MSKVIB. Its headquarters at Nagpur were of course closer to Chandrapur/Bhandara than MSKVIB's at Bombay. But once the State Government decided that DCVL should take over this activity from MSKVIB, the former did its best to study and prepare a detailed project report for not only taking over the existing infrastructure from the MSKVIB but also for expanding tasar development in the area. Due to various administrative/legal problems the changeover from MSKVIB to DCVL took about a year and in the interval there was some dislocation of activities.

DCVL's entry point to the tasar industry was the weaving sector, where it has protected some 800 jobs of the local artisans through assured raw material supply and a market outlet. Prior to DCVL's entry, the bulk of the cocoon produce of the Vidarbha region was purchased by traders from Madhya Pradesh and Andhra Pradesh, and only a small amount by the traditional weavers, the Koskati caste. Due to lack of ready capital and facilities for stocking of raw materials, the weavers had gradually got displaced from silk weaving. Efforts had to be made to reorganise the reelers, spinners, twistors, and weavers, and a long standing commitment of ensuring employment all the year round. Shortfalls in local cocoon supply have been compensated by purchase from the Raw Material Bank (Chaibasa).

Weaving and pre-weaving activities are concentrated in Bhandara district. Chandrapur district has just six weaving families, and about 50 persons engaged in spinning and reeling of tasar silk, working under the umbrella of DCVL's silk project.

In 1973-74 the DCVL started procurement of tasar cocoons directly from the rearers at a fixed rate in consultation with the Central Silk Board and procured Rs.57,000 worth in that 1st year. In 1980-81 its cocoon purchases had risen to Rs.6.35 lakhs. Today DCVL procures as per its estimates 90-95 per cent of the total local sale of cocoons.

DCVL's activities now range across a wider canvas, following an integrated approach by linking the local production sector, the processing and weaving sector and the marketing channels. Table 1 provides a measure of the progress made by it.

When in 1981, the Central Government decided to launch the Inter-state Tasar Project (ISTP) in seven states including Maharashtra, the choice fell upon DCVL as Maharashtra's implementing agency for the ISTP because first, Maharashtra Government, unlike other sericulture states, has no Department of Sericulture and secondly DCVL - a Government Corporation - was already in the field. It had a fairly active tasar development programme and a well motivated and knowledgeable staff which included the former MSKVIB extension personnel.

Today DCVL is continuing with its general tasar development programme of assisting the estimated 3500 tasar rearers in Chandrapur and Bhandara, while at the same time implementing the ISTP, that is, intensive assistance to selected 500 rearers.

### The Inter-State Tasar Project:ISTP

According to a report by the Central Tasar Research and Training Institute, Maharashtra State has a total of 5,000 tribal rearers as compared to the total of 12.7 lakh tribals engaged in the tasar industry in the tropical zone in India. Of these 5,000 rearers, ISTP is to cover 500 rearers in Chandrapur/Bhandara.

To recapitulate the main object of the ISTP is to *raise the income and quality of life of poor tasar rearers* and to give them *each one hectare of arjun plantation, inputs, technical services and marketing support.* Item-wise, the principal constituents of the intensive assistance to 500 rearers in Chandrapur/Bhandara under ISTP are:

- 1 Establishment of Arjun bush nurseries.
- 2 Plantation of Arjun bush in 500 hectares (one hectare each per rearer), fertilisation and maintenance of fields for the first two years and thereafter assigning them to the rearers.
- 3 Providing door-to-door technical guidance to 500 rearers through an extension service.
- 4 Establishment of a Pilot Project (Seed Production) Centre
- 5 Establishment of a cold storage
- 6 Establishment of a Grainage
- 7 Establishment of marketing and storage facilities
- 8 Development of reeling
- 9 Training of functionaries in India and abroad.

These programme, items 1 to 9, are to be accomplished in two phases over a total of five years. First phase extends from 1981-82 to 1983-84, and second phase from 1984-85 to 1985-86.

It is necessary to emphasise at the very start that this study was carried out when the project had worked for less than one year; and activities listed, from 4 to 9 above, had not even been taken in hand. In fact, they could not have been taken in hand because most of them are scheduled to be undertaken only during the later part of the first phase or in the second phase. Progress (as scheduled) had however been made in the first year with the implementation of items 1 to 3 above. Other activities such as supply of seed, procurement of cocoons, reeling, weaving and sale of tasar were also being carried out though not as part of ISTP but that of DCVL's existing tasar programme and with its existing facilities; comments on these activities therefore do not reflect the qualitative and other changes that may follow the completion of the entire infrastructure of items 1 to 9 above, under ISTP. But these comments and some of them critical have been included here because they highlight pertinent issues and it is hoped DCVL and ISTP would gain by reflecting upon them and taking timely corrective action.

#### Nurseries and Plantation

The project aims at diverting the rearers partially from Ain trees to Arjun plantations which are expected to provide a more assured supply of foliage for the rearing of silk worms. Ain trees being low density fodder trees in forest land are not economical; they are also far from the dwelling places of the rearers. The project is expected to set up 5 nurseries of Arjun bush, one each for an area of 100 hectares of Arjun bush plantation. Two hundred hectares are to be planted with Arjun trees (4' x 4') in the first year of the project 1981-82. In 1982-83, an addition 200 hectares are to be covered. The remaining 100 hectares will be covered in 1984-85. Thus in five years, 500 hectares will be completed.



In the third year a partial crop and fourth year a full commercial crop, full foliage, will be possible. Therefore, in the third year, DCVL is to identify 200 rearers through their field supervisors to assign the mature plantations to the rearers. For this purpose, a survey will be undertaken to identify the 200 rearers who will use the 200 hectares of economic plantation to rear silk worms on it.

In 1981-82 the two main plantations, one at Wakdi (Garchiroli Tehsil) had already covered 133 hectares and the other at Mendki (Brahmpuri tehsil) 50 hectares. Visit to Mendki Arjun plantation showed that 34,000 Arjun bushes had been planted in 50 hectares; one hectare having 6800 plants. However, the larger trees and Arjun trees already growing in this area have not been cleared. Of the 50 hectares three sub-plots are marked for the purpose of maintenance. Staff for each sub-plot consisting of one supervisor and five labourers, were in position. Water for trees (1½ ft high) was brought from a nearby nallah. Though some trees had died, most were growing well.

According to the project report rearers were to be involved in the raising of nurseries. However, this was not done, and the reason given by the DCVL was that during the season it was not possible to engage them since they were busy with fishing. Rearers were also to help select sites for economic plantation. This too was not done. DCVL explained that the process of involvement of rearers was to be negotiated with the forest department with which relationships have yet to be sorted out.

#### Forests and tasar rearing

There are indeed numerous difficulties in arriving at a satisfactory and speedy assignment of the forest land for the plantation programme of the project. This despite

the fact that there is a High-power Committee at the State level (which includes Secretary Forest Department and the State's Chief Conservator of Forests) to facilitate inter-departmental coordination and expedite government level decisions required for project implementation.

For example, the Central Government has stipulated that the State Government will provide forest land required for the project, free of charge. But the Forest Department is demanding the usual 8 per cent royalty and its waiver has still not been settled.

Another example is considerable time lag between physical handing over of the sites to DCVL and the decision made to this effect at the State-level Coordination Committee which includes the highest Forest Department officials and where the concerned District Forest Officers (who are to implement the decisions) are also invited to be present.

Even where land has been assigned to DCVL, the Forest officials have withheld permission for building a few rural huts (required for the field workers to stay on the spot) on the grounds that under the recent Central Ordinance no construction can be allowed in the forest areas. The few rural huts are interpreted as prohibited construction!

The harassment of the rearers, entering forest areas for rearing by Forest Guards and related extension of bribes is a general all-India problem too well-known to be elaborated here. In this case rearing is done on forest land taken on a leasehold basis. Royalty paid is Rs.5 per acre per annum. Earlier, the rearers selected the plot of fodder trees and applied for that plot according to its revenue number. Criterion of getting a plot was

being a hereditary rearer. Now, rearers apply through the DCVL, who deducts the royalty from the amount to be paid to a rearer for his cocoon produce. DCVL gets application from all the rearers processes them, gives details of location of forest area applied for, its total acreage and the particulars of rearers applying. And, yet the harassment of the rearers continues.

The leverage for harassment lies in the fact that though it gets the applications and royalty from the rearer through a Government Corporation, the Forest Department does not issue any document or authority letter to the rearers. Its own lower officials e.g. rangers are also not informed and who use this pretext to harass the rearers for royalty. In case of crop failure DCVL itself credits the royalty amount to the Forest Department, but the latter still sends challans to the rearers.

Again though the royalty fee (of Rs 5) right from the British days when it used to be only 50 paise, includes payment for fuel wood which arises from the rearing process itself, the rearers are frequently stopped and harassed.

Encroachment on rearing sites is one of the major problems faced by the rearers. There is increased felling of Ain trees by the local farmers (Kunbis) for clearing the land for agricultural purposes. Collective representations have been made to the forest department officials and the DCVL officials by the rearers of various villages. In Saigaon, Brahmपुरi tehsil, the rearers confiscated the axes and ploughs of the encroachers and turned these items over to the forest department at Gangalwadi. However, the rearers, who are prepared to fight all-out to preserve the forest land they have been using for generations for tasar rearing, feel they are in

a weak position since, in most cases, the forest department has given them no official statement or documents, granting them the usufruct of the Ain trees for rearing; and that the forest staff seems to lean in favour of the Kumbis. Although aware of their rights having paid the royalty, the general feeling is that it is the DCVL which will have to take the lead in resolving this problem, and the rearers will lend them full support, since action taken by them independently has borne no fruit.

Paradoxically, some rearers perceive the DCVL as encroachers as well. They believe that their traditional jungles have now been given to the DCVL to raise the Arjun plantations, which they perceive as an encroachment on their land. The general complaint is that, "Even though we have been rearing for generations on the same forest site, we still do not officially own the plot."

These hurdles in the attitude and practices of the Forest Staff and Department require firm guidelines to be issued by the Central and State Forest authorities to enable the ISTP to progress smoothly and the rearers to carry out their activities with dignity and without day to day harassment by resident forest staff.

DCVL has suggested to the Forest Department that collective applications be made and forest land be given on lease hold to DCVL for a period of 10 years. No action has been taken so far on this proposal. A more effective and lasting solution of the problem would be to transfer the forest land to cooperatives of rearers on long-term lease. The forest officials

could be given representation at the level of the management committees of these co-operatives to watch over the use of the forest area. Such an arrangement while protecting forest interests will eliminate day to day interference and harassment of individual rearers by forest staff. Such a cooperative will also strengthen the hand of the rearers and the forest authorities in preventing indiscriminate cutting of fodder trees by powerful elements who present<sup>ly</sup> unchecked because rearers are defenceless without formal lease and have to resist encroachment on an individual basis.

INPUTS: Seed Cocoons

As noted earlier, the pilot project (seed production) Centre - PPC, has not yet been set up. The project is relying on its old facilities.

There is but one centre at Arumori which at present serves only 20-25 per cent of the rearers with disease free lays (dfls). The dfls are being supplied in order to reduce the incidence of crop failure due to disease and thus increase production. Seed cocoons are also made available to the rearers from certified rearers.

In Chandrapur district it is essentially Mulki or the Bhandara local variety of tasar that is reared. This is a multi-voltine variety, three crops being taken yearly, although four crops can be taken. The fourth crop however is not feasible since there are not sufficient foliage left for fodder. Since all the cocoons are steamed and dried, seed cocoons for the next season are collected from the jungles, after the festival of Holi, stored in earthen pots and on the commencement of the season, used as the first seed crop.

However, often adequate amounts cannot be gathered. The DCVL, therefore, introduced the Daba and Sukinda hybrid variety in some pockets which are bivoltine and trivoltine respectively. In both cases the period of metamorphosis is long enough to allow cocoons to be stored as seed crop from the next season.

Field survey showed that while in Garchiroli Tehsil the majority, 43 out of 49, took seed cocoons from private rearers, in Brahmpuri tehsil, the DCVL is a significant supplier - 57 were buying from DCVL against 45 from private rearers. In both centres a large number of rearers stated that DCVL supplies of seed were not on time. In Brahmpuri the rearers appreciate the quantity and quality of seed supplied by DCVL. "Technical mishandling" i.e. poor quality of dfls was listed among the major factors inhibiting some of the rearers from taking cocoons from DCVL. Poor supply of seed cocoons and eggs leading in turn to poor capacity of rearing as well as poor effective rate of rearing. (DCVL is presently meeting only 1/4th of the demand for dfls.) Poor crop is also believed to be of a cyclic nature -- every three to four years there is a poor crop -- then <sup>a</sup> bumper crop. Reasons for failure of crop are believed to be (a) the ways of the tasar goddess and her divine will, (b) inauspicious days and (c) natural hazards - change in weather - excessive heat and humidity or cold. Predators and disease. The main diseases are pebrina, graseria, museardia, flaccheria, parasite flu, predators.

Another problem is that good and bad cocoons are mixed. There is no grading. With some bad seed cocoons the whole crop gets damaged. DCVL explains that in some cases dfls though not of poor quality may have failed due to bad weather -- heavy untimely rain or severe wind which damage the 2-3 day old larvae.

It was found that in certain villages, the rearers were superstitious of the introduction of the new varieties. For instance, in one village, one of the rearers used seed cocoons of the Sukinda hybrid, as a result of which the other rearers felt their Mulki crop had been adversely affected - resulting in a poor produce. When probed for a plausible reason for this phenomena, most of the rearers were unable to explain, though a few felt that perhaps the new variety spread some disease to which their Mulki crop was susceptible.

It is an area requiring urgent DCVL attention that is even before the PPC is set up, to ensure supply of good quality and graded seeds to protect its image which if once allowed to be spoiled may prove an impediment for the new ISTP facilities. This only stresses the need for early completion of the technical infrastructure envisaged in the project i.e. *Cold Storage and* the pilot projects (seed production) centre - PPC, for supply of high quality and graded seeds which are fundamental to the whole project.

#### Inputs:Credit

Institutional credit is a vital input for the success of the project since the rearers are generally assetless and poor. To facilitate the flow of credit DCVL has mobilised the support of the Bank of India (BOI) which has a number of branches in both Chandrapur and Bhandara. The banking policy is that there should be a sponsor. Bank will cover borrowers only within a 15 km radius beyond that an agency is required. Even though no guarantor is required for a loan of less than Rs.5000 as per Reserve Bank's instructions, DCVL stands as an unofficial guarantor even when average loans given by BOI is Rs.500 only. Though DCVL does not take on any liability in case of default, BOI

takes a certificate from DCVL that DCVL will arrange for repayment of loan.

The criteria is that the applicant rearer must be a landless or a marginal farmer and a traditional rearer. Performance of past three years in respect of production/repayment is taken into account as also whether royalty has been paid or not. Those who have misutilised loans in the past or those selling cocoon to private trade are disqualified. The applications are then forwarded to BOI.

Date and venue of disbursement of loans is fixed jointly by BOI and DCVL on a day convenient to the rearers e.g. on market days. The loans are given in the form of cash credit with a fixed cash credit limited (CCL) over a period of time, generally three years. New demands are not required to be drawn up each year. Credit-debit is allowed during the period for which the CCL is fixed and thus documents are not concluded each year. CCL is usually Rs.500 over three years. The actual loan amount is however arbitrarily decided, that is, it is not determined by any business and economic necessities. Though loans are categorised for seed cocoons and consumption, consumption loan is a mere fiction since the loan amounts are pitifully low and, as stated earlier, arbitrarily decided. Rate of interest is 4½ per cent per annum and subsidy (a maximum of 33%) is given in eligible cases from the Integrated Rural Development Programme.

Cash credit actually allowed to be drawn is after deduction of the dues of the previous years. Therefore, at times rearers are given such ridiculously low sums as Rs.8, Rs.12 which is the balance outstanding after deductions. More than 50 per cent accounts are reportedly in default. Wilful defaulters are subject to recovery under revenue proceedings.



As a result of all these efforts DCVL has succeeded in sponsoring 1251 rearers and BOI loans outstanding as on 30th June 1981 were Rs.6,18,000 compared with just 10 rearers who got tasar loans in 1976. This progress is not without problems which need to be resolved. Some of the problems and issues relating to bank credit recorded by the field study are:

- (a) Loans are not given on time - therefore several dhimars cannot rear since they cannot buy seed cocoons on time and miss the season.
- (b) When loans are given too late, the price of seed cocoons is too high at the far end of the season, so either the prices are prohibitive or purchase implies ultimate loss to the rearer.
- (c) Loan amount is inadequate to meet both needs i.e. consumption and seed cocoon. Loan amount is decided arbitrarily each year normally between Rs.100 and Rs.300 but often goes below Rs.100.
- (d) No loan account statement is given to rearers though in principle BOI has agreed to do so. Reason advanced for not giving loan account statement is that forms are not available and there is shortage of staff. Owing to lack of any documents in his hands the rearer is totally at sea about the actual amount he has borrowed each year, the default, etc.
- (e) Due to repeated failure of crop in the past few years rearers are unable to repay. Borrowers say there is a 4-year cycle of bad crops followed by a bumper crop. But BOI has some doubts whether the 'crop failure' is not a sob story to avoid repayment. Although DCVL is on the scene and involved, it is strange that the BOI is unable to clarify its doubts with the help of the former. A look at DCVL's purchases of cocoons show a marked fluctuation. It purchased over

87 lakh cocoons in 1974-75 but only 17 lakhs in 1975-76. Again it purchased 100 lakh cocoons in 1977-78 but only 38 lakhs, 50 lakhs, 61 lakhs and 43 lakhs in the four subsequent years 1978-79 to 1981-82. These fluctuations in DCVL's purchases are not unrelated to annual fluctuations in crop and the BOI which is also DCVL's banker cannot be unaware of it. The problem thus appears to be attitudinal.

- (f) While the rearers are illiterate, little has been done to develop their awareness. The study showed that few knew the rate of interest. Some knew the source of loan as BOI, rest believed DCVL gave loans. They are also not sure about loan amounts. They are also unaware of default and know about it only when BOI officials tell them that they have exhausted their limit. BOI feels that village meetings to raise awareness would be a waste of time and impractical because of inadequate staff but thinks that DCVL ~~should~~ should make the borrowers aware of banking policies.
- (g) Most rearers are not able to get loans for agriculture or consumption but only for tasar and even for tasar it is inadequate. The pressure for diversion is therefore considerable. There are Land Development Banks but loans are given against land mortgage. In case of default, land is not given back.

#### Marketing: Cocoon purchases

Like most public programmes in India, this programme too aims to free the producers from the clutches of private traders. This is sought to be done through procurement by a public marketing organization (DCVL) with the promise of a higher/steady price and fair trading practices.

In this case, DCVL has been procuring cocoons in Chandrapur/Bhandara since 1973-74. The volume and value

of cocoons purchased by it have been referred to earlier and yearwise data is given in Table 1. This is the most difficult part of the operations as it is not easy for a public agency to combat with highly entrenched and experienced traders. The cocoon rearers too though unhappy with the traders for obvious reasons still turn to them because of long history of relationships or due to dissatisfaction with the public marketing organisation or at times for ready cash.

DCVL's marketing operations are, to repeat, part of its general tasar programme so far. The marketing facilities with modern equipment and testing facilities under ISTP have not yet been set up. DCVL as noted earlier is procuring about 90 to 95 per cent production which virtually makes it a monopoly buyer without any legal restriction on the private trade. Though there is no law supporting it DCVL monopoly is fortified by the loan terms which require the rearers to compulsorily sell to DCVL and per contra by the denial of loans to those rearers who sell to private trade.

The crux of the matter is the price paid by the DCVL. DCVL follows the price fixed by the Central Silk Board - something to which the private trade is not committed.

One of the major irritants as perceived by the rearers is the poor price paid by the DCVL for their produce. (Table 2). The rearers resented the fact that in 1980-81 procurement period, the prices for the cocoons had not been announced before procurement. They felt bound to sell their cocoon

produce to DCVL only because of the undertaking to do so on taking the loan. They cannot of course hold back the crop because they have no means of storing their produce and for fear of the moths emerging from the cocoons, thus reducing its value. However, in the last procurement period, the DCVL announced the rates before procurement.

Related to procurement and prices, is the site of procurement. This is another irritant. The DCVL has eleven procurement centres at present, and the rearers have to travel long distances to get to the procurement centres. The rearers feel that the DCVL should come to their villages and purchase the cocoons, as was done in the past by the private traders.

In fact, on several counts, the rearers tend to compare DCVL to the earlier private traders. Rates for the cocoon produce were settled by bargaining with the private traders, which gave them some say in the process, unlike what happens with the DCVL. On the other hand, the DCVL gives a better rate than the rearers found good, but in the subsequent years the rate has been poor and the rearers felt cheated. The private trader is also remembered for the mode of payment. The private traders used to give ready cash for the produce and procure the cocoons from the village itself. The DCVL expects the rearers not only to come to their centres which the rearers find difficult, but also to return another time for payment. The DCVL stated that they were also making cash payment at the time of purchase but the rearers do not confirm it.

Another grouse against the DCVL by the rearers was that "the DCVL does the grading of the cocoons while procuring the cocoons, just as they please."

It was observed during the field visits that if the number of cocoons fell short of making a complete unit (e.g. a moot) of a particular grade, those cocoons were shifted to a grade of a lower quality, thus bringing in a lesser income.

The rearers were aware of the fact that on the whole, the private traders had exploited them in the past. For example, the private traders used to share alcohol with the rearers. Later the rearers realised this practice adversely affected the price negotiations. So they learnt to fix the prices first and then drink. However, even now they feel tempted to sell to the private traders, who try and lure them away by offering a marginally higher price than what the DCVL does. DCVL explains practices initiated by the private traders relating to purchase and sale of cocoons. For example, the rearers offer worship during the procurement period. The merchants used to give them "Bojara" i.e. gifts to the members of the rearers' families. Although the traders manipulated to fix the procurement price low, they gained a psychological effect by evoking the interest of the members of the family by offering them small gifts. There was also a tradition that when Bojara was offered the rearers and their family members used to wash the feet of the traders, a practice abolished by DCVL. But DCVL is offering Bojara and has been authorised by its management to spend up to Rs.750 to Rs.1000 unvouchered expenses on small gifts for family members. It is also giving the rearers puja material which includes aggarbatti, dhoop, kumkum, haldi, paans etc., all wrapped up in a plastic cover. DCVL also hopes to introduce first, second and third prizes for the best rearers to encourage competition. On the whole the rearers are glad for the presence of the DCVL. (Table 2).<sup>22</sup> The steady market outlet and the availability of loans for rearing make it possible for those who could not afford to make the initial investment to resume this occupation.

### Extension Service

DCVL is expected to provide "door-to-door" extension service and guidance to the rearers about improved tasar cultural practices.

The first point of service is in increasing the supply of fodder/food for the rearing of silk worms. A major problem is the erratic and insufficient density of fodder trees (Ain) in the forest rearing sites. A part of this solution lies in protecting these sites from illegal felling and formalising the lease arrangements. As noted in an earlier section DCVL, though it has been in the field for the past 7-8 years, has not been able to improve the situation much, partly because of the difficulties with the Forest Department considered earlier in detail.

Another solution is <sup>is</sup> (what sought by ISTP) ~~to~~ to reduce the rearers dependence on Ain forests by a supplementary and more assured and protected supply of foliage from Arjun plantations, one hectare per bearer. Here the extension service has made a notable contribution in terms of speed of implementation of the Plan for nurseries and establishing plantations of Arjun bush. But there are problems too. The rearers have not been associated in raising nurseries or plantations, nor made aware of the whole plan - the project is to unfold over five years.

Then, a large proportion of the surveyed households in the vicinity of the Mandki and <sup>a</sup>Wadi plantations were found to be more than 5 kms away from either of the plantation sites. This makes it difficult for the rearers who have to tend to other activities also. Especially for women workers distant sites may result in loss of employment.

On the other hand, hardly anyone felt the distance to and from the forest rearing site to be a problem but the rearers repeatedly expressed their fear of the problem of the distance from the economic plantations of Arjun trees under the ISTP since plantations require more intensive labour and maintenance.

Again, the one hectare of economic plantation per rearer does not seem to satisfy the rearers (Table 2) though it was found later that their responses were based on their lack of knowledge of the project. The same question, when asked of them after explaining the import of the one hectare per rearer policy of the ISTP, drew a positive response in favour of the policy from the rearers during the general discussions.

The fate of the remoter tasar rearers in Sironcha district, the Gonds who are the actual tribals constituting 54.26 per cent of the total tribal population of Chandrapur district is uncertain. In the course of discussions with the DCVL officials, it was learnt that the DCVL tasar development project and subsequently the ISTP is being withdrawn from Sironcha tehsil, due to the planned irrigation project in that area.

The second item of crucial service is the supply of good seed and on time. In seeds, DCVL is handicapped since neither the PPC nor the cold storage have yet been set up which could have helped in enhancing the propagation of the traditional variety Mulki. In its absence, the Sukinda and Daba introduced by the DCVL extension organisation are meeting with considerable dissatisfaction because Daba consumes larger quantity of leaves than the traditional Mulki which is small in size and yields only 700 mtrs. filament length in one cocoon, compared to 1200 mtrs. filament length yielded by Daba. The local Mulki is however finer and fetches more value.

This reveals that the communication between the project and the rearers is not as good and extensive as expected of a live extension service. The project knows what is in the best interest of the rearers and has therefore taken to promoting Daba and Sukinda through its extension organisation, but has shown little concern about their acceptability by the rearers.

Complaints with regard to the quality of seeds supplied and their grading have been noted earlier. More than that there is a general complaint that even what is supplied is not timely. In operations of this nature time is the essence; and there could be no greater criticism of an agricultural extension organisation than with regard to untimely deliveries.

The third important service relates to help in the disposal of cocoons at a good price. The cocoon purchases of DCVL have helped the rearers from exploitation by the traders. But DCVL needs <sup>to</sup> review its system of purchase - far away from the village and non-payment of cash on the spot and unilateral fixation of purchase price, to enhance the satisfaction of the rearers and their confidence in its service. The test is that rearers must turn to it not merely because of the linked loans but ~~for~~ <sup>provided by</sup> a better marketing outlet than ~~the~~ private traders.

Fourth area of service is inputs where credit comes next only to the supply of seeds in importance. The DCVL is doing "half the banks' job" in sponsoring/recovering loans. It is also doing a great deal to secure the cooperation of the forest authorities, a vital albeit intangible input. Both are highly commendable services.

Where the DCVL's extension service is the weakest is in limiting itself to tasar only. When one is merely doling out



a specific programme and physical inputs, one can afford to put on blinkers. But ISTP aims at "raising the quality of life" of the rearers. Tasar is only one element in their livelihood let alone their life. Rearers expect DCVL to help them with their other general development problems/opportunities such as agriculture too. Their demand for "more" of DCVL's services is an implicit recognition of its present helpful role.

At the same time, DCVL should also take note of some of the critical perceptions of its role by the rearers served by it as gathered during the field study, even if they do not necessarily represent a majority view.

- (1) Forest lease, loans and seed cocoons should be made available on time. For the forest rearing site, to seed cocoons to loans - we depend on the DCVL. But we have to make 10 rounds to them before anything comes about. It is therefore better to borrow from other sources and undertake rearing.
- (2) We should get more to invest in tasar rearing.
- (3) Tasar rearing is not sufficient - we also need land for cultivation - only then will the situation improve.
- (4) Production has been very poor during the past 2-3 years. By now we have a debt of about Rs.500 on us. After this we get no loan. So how can we undertake rearing.
- (5) We can take loans easily only from the money lender. We are illiterate people and have a lot of problems in taking loans from the bank. But the money lender is not prepared to give us loans anymore because our sales are tied to DCVL.
- (6) We are not using any development scheme. We are told that there are several schemes for our development. But we don't have the capacity or basic education to avail of them. DCVL is not helping in this matter.

- (7) We have heard that the banks do give loans for other occupations, but we have never availed of it from this village (Mendatola).
- (8) After 2-3 years the tasar goddess (Kosa Devi) comes and blesses us with a good crop - but then the DCVL reduces the rates.
- (9) Tasar production can be improved by the DCVL but then it will have to change its method of work - prompt delivery of services on-the-spot, especially DCVL should buy the cocoons in our villages and pay cash on delivery and the rates for cocoons should be settled in consultation with us.
- (10) General feeling is that because they are poor and illiterate, the DCVL nor the BOI is prepared to listen to them. In addition there is strong lack of self-confidence in expressing their viewpoint. This also highlights around lack of communication.
- (11) DCVL's presence has not resulted in a substantial increase in production, although the number of rearers has registered an increase. DCVL extension staff came when the DCVL had just started operating in the tasar field. But soon after, no further dissemination or exchange of information took place.

Impact on income of rearers/weavers wages

The ultimate aim of the programme is to make an impact on the income of the rearers and the wages of other workers in the industry as for example weavers. For the reasons stated earlier it is too early to consider the impact of ISTP on income of the rearers. Nevertheless, an analysis has been carried out here of the existing tasar operations of DCVL as it raises important issues which deserve the notice of both DCVL and ISTP authorities at the national level.

DCVL's achievements have been significant, as seen from the data provided by the Tasar Silk Report of the DCVL. Number of cocoons reared and purchased under the project in the Vidarbha region shot up from 15.69 lakhs in 1973-74 to 61.92 lakhs in 1980-81, the corresponding value having gone up from 0.57 lakhs in the beginning year of the project to an estimated Rs.6.35 lakhs in 1980-81. But both the quantity as well as the value series show fluctuations of a fairly high order, as can be seen from the first two columns of the attached table. What is striking is that the number of rearers under the project shows a steady increase from 75 in 1973-74 to about 800 in 1980-81. While this by itself is a good thing, what it implies for per capita production and per capita earnings is not difficult to see. It is clear that the steady rise in the number of rearers combined with fluctuating totals of value and quantity over the years indicates fluctuations of much larger amplitudes in per capita terms.

In order to get an idea about the relative magnitude of the fluctuations, we calculated the coefficients of variations in total production and sales over the eight year period. While these turn out to be 0.52 and 0.57 respectively, the corresponding figures for the per capita categories stand at 1.01 and 0.81 respectively (Table 3). Thus production fluctuations are over 90 per cent and earnings fluctuations are over 40 per cent higher in per capita terms. It is also instructive to note that under this scheme the average earnings per rearer has gone down from Rs.771 in 1973-74 to about Rs.454 in 1980-81. This sharply contrasts with the economic prospects held out for the rearer families in the project report of the Inter-State Tasar Project (Revised Project Report, Annexure XV, Central Silk Board, Ministry of Commerce, Department of Textiles, Government of India).

Tasar rearing is a hazardous and uncertain job. Food plants are scattered over wide areas and it appears from production figures that there is perhaps a kind of a cycle operating in cocoon production. The agronomic aspects of this feature of tasar production, to the extent it exists, needs to be carefully looked into, and steps taken to bring down fluctuations in production.

The low mean returns to labour coupled with wide fluctuations in prices and production is what makes this very labour-intensive occupation such an uneconomic one. If the ISTP is to succeed, it will have to not merely pull up average returns on production by providing adequate credit and other infrastructural facilities it will also have to stabilize prices as well as production to reduce the element of uncertainty associated with the occupation and making it more attractive to those for whom it is designed.

#### Weavers Wages

The profit and loss account of the Tasar Project under the DCVL for the year ending 31st March, 1981 shows that the salaries, wages, bonus and other benefits of the staff was Rs.2.58 lakhs and Rs.2.29 lakhs for the year 1981 and 1980 respectively. Administrative expenses stood at Rs.2.25 lakhs and Rs.1.36 lakhs respectively for the two years. The total turnover in the Profit and Loss Account attributable to the tasar project is reported to be of the order of Rs.28.72 lakhs in 1980.

These are large numbers and one would like to know how the actual rearers and weavers are faring in the whole set-up. From the available information it is very difficult to come to clear-cut conclusions. What we have attempted instead is to try to work out the nature of trade-offs, say

between wages on the one hand and DCVL's profit on the other, within the existing set up, under alternative hypothetical scenerios. What follows is an exercise of this kind and similar simulations can be worked out using other parameter configurations.

Working through the cost sheet of unprocessed tasar gaicha cloth, it is seen that the selling price of a meter of this cloth is set at Rs.40.67 of which Rs.31.28 is the cost of production and Rs.9.39 is the 30 per cent cost plus margin. Within the cost figure of Rs.31.28, only Rs.5 are weaving charges per meter of cloth and the remaining Rs.26.28 are raw materials and direct expenses. The 30 per cent margin is broken up into two broad categories: 15 per cent of this figure is earmarked as administrative expenses and 85 per cent is treated as profits.

If weaving charges are raised from Rs.5 a meter to Rs.6 a meter, which is a rise of 20 per cent, cost per meter will go up from Rs.31.28 to Rs.32.28 — an increase of only about 3 per cent. If prices are kept constant at the previous level, this will entail a fall in the margin over cost from Rs.9.39 to Rs.8.39. That is to say, instead of 30 per cent previously, it will now be about 26 per cent and profits will now be set at Rs.7.13 a meter instead of Rs.8.01. If the absolute level of the cost plus margin is maintained, price goes up by a rupee while the rate of profit falls by less than one half per cent — from 19.61 per cent previously to about 19.14 per cent. Table 4 presents some of the alternative possibilities under different hypothetical situations. Similar simulation exercises can be done on the cost structure of the processed cloth as well.

The important thing that emerges from the simulations is that there is substantial scope for looking into the possibility of raising the wage rate for weaving by marginal

reductions in the profit rate. Even in the most adverse case, i.e., where the entire incidence of the 20 per cent hike in weaving charges is borne by the DCVL and no part of it is shifted to the consumers in the form of a price hike, the rate of profit falls from the current level of 19.61 per cent to 17.52 per cent -- a fall of barely 2 per cent. It seems imperative therefore for the ISTP to look more closely into the cost structure of tasar production and ensure that this large project with all its infrastructural facilities is able to adequately reach the people it is designed to reach.

The People

Tasar silk worm rearing in Chandrapur district is done in the forest of Garchiroli, Erabapuri and Sironcha tehsils. The Dhimars are traditionally the rearers in this area except in Sironcha\* district, where the local Dhimars refuse to rear silk-worms, and hence the Gonds and Naiks have taken to rearing.\* Gonds are also found in Garchiroli tehsil, but they do not engage actively in tasar silk worm rearing.

The Dhimars

The field survey in Chandrapur district as well as secondary data defines Dhimars as a caste of fishermen. The Dhimars consider themselves, a part of the caste hierarchy of the village occupying a position on the social scale equivalent to the Shudras or Scheduled Castes. The Dhimars occupy a position inferior to the Kosti or Koskati caste, the traditional weavers of tasar silk fabrics, who consider themselves as Kshatriyas, in the

---

\* Maharashtra State Gazetteer, 1974.

caste heirarchy. However, secondary data (see Appendix II.10) revealed that the social status of the Dhimals is a peculiar one. On the one hand, being palanquin-bearers cooks and household servants, the Dhimals have been promoted to a ceremonially clean group. Living in separate settlements within a village, the Dhimar community has its various sub-castes - the two major ones being the Kevats, the fishermen community and the Bhataras, the tasar silk-worm rearers. The Maharashtra State Government has listed the Dhimals under Nomadic Tribes.

#### Tasar : As Occupation

Though there is a definite social significance attached to tasar rearing, a forest based activity, it is the economic consideration that dominates participation in this occupation. Both Dhimar rearers, and non-rearers, mentioned that they are not socially bound to rear by virtue of being Dhimals.

A section of Dhimals did not rear, while others had stopped rearing after having done so for generations, since production had slumped drastically in the past few years and showed no signs of picking up, the element of risk attached to it had increased.



A broad profile of the distribution of Dhimars and amongst them tasar rearers in the surveyed villages as gathered during the field survey is given in Table 5†. Approximately half the Dhimar households in the 8 villages are engaged in tasar rearing. Of these, 2/3rds were selected for household survey for this study. Of these selected households a slightly higher percentage are found in the marginal farmer category of 0.1 to 2.5 acres of land. Though the identification of landless or those with land was done from the information given by DSVL, the occurrence of slightly larger percentage of small cultivators over and above landless seems to indicate that this is the predominant characteristic of Dhimars.

Table 6 distributes the sample population across land classes. In Garchiroli there are many more small peasants than the landless according to the sample, though this may not be representative of the distribution pattern in the total population of Dhimars. By and large there are a few more males than females though the reverse also is noticed in a few villages.

---

\* The methodology of the field survey, sample and limitations have been detailed in the Appendix I; and as pointed out, all the observations can be generalised though they do present facets of a general phenomenon. Repeated reference to these qualifications has been avoided in the text.

There does seem to be some link between the land class categories and household size which varies from 5 members in the landless category to 10 in the households with more than 5 acres. (Table 7).

Notice in Table 8 that as the size of land owned increases, a higher percentage of workers are occupied in agriculture, though whatever the size of land owned tasar remains a significant activity.

Tasar rearing and agricultural labour occupy more or less equal places amongst the landless in Garchiroli but tasar rearing emerges as more important amongst the landless in Brahmpuri. The difference between these two tehsils is explained partly by the participation in fishing which seems to be twice as important in Garchiroli than in Brahmpuri.

Fishing is a male dominated occupation for the sample households, and the few who are occupied in cattle grazing are mainly children. Cultivation on owned land is mainly done by the male members of the household while the female members of even landed households go out for wage labour in agriculture. In Tasar rearing, men and women seem to work in equal number, the share of women

being just a little less than that of men. Children also seem to take fairly active part (Table 9).

Further analysed in terms of age and sex specificity (table 9) reveals that size of land seems to make a significant difference in participation of female and children much more than males. For example, notice column 3 where <sup>the</sup> reverse phenomena prevails between Garchiroli and Brahmipuri in which children participate much more amongst the small peasants in Garchiroli and much less in Brahmipuri. The reasons for this regional variation are not easily identifiable. In agriculture labour there is evidence of child participation whether it is in cultivation or in wage labour amongst the small peasants rather than landless labourers.

Women amongst the landless seem to be far more visible in agriculture than in tasar rearing relative to their males who are more in the tasar rearing than in agriculture labour. This phenomena occurs even amongst small peasants.

The contribution of different activities such as agriculture, labour, tasar, fishing, cattle grazing in which the Dhimars engage themselves (Table 10) reveals

their dependence on all these activities to make a living. Agriculture is dry, subsistence farming (Paddy/Jowar); tasar is cyclic, one good crop year followed by four poor crop years. Agriculture sustains them and a good tasar crop as they put it symbolically "helps to tide over a daughter's marriage".

Table 11 reveals the high intensity of labour in terms of hours per day required for tasar rearing during the season which extends from November to February. Whatever the land class, men spent 10 to 16 hours a day - an average of 13 hours a day in tasar cocoon rearing during the season; women and children slightly less, average around 8 to 10 hours per day. The observation in the field endorses this data namely that during the peak season tasar rearing takes the full day and more of most members of the family.

In Table 12, in both the cases fishing and agricultural labour seems to pay higher rewards amongst the landless than tasar rearing. This pattern continues even amongst the small peasants though there is a slight increment in income in Garchiroli amongst the small farmers in tasar rearing compared to fishing. Income from tasar is of course confined to the small part of the year to which this activity is confined.

Table 13 reveals the abysmal level of literacy in the tehsils whether males or females. In Garchireli, out of 139 males only 24 were literate of whom only 3 had passed high school.

Of the 141 females only 3 were literate of whom 2 were in primary and one in middle school. Interestingly the number of literates are more amongst the landless and amongst the middle cultivators though if the sample population is grouped into these two strata landless and land owners the dispersal is more or less the same. In Brahmpuri tahsil too the literacy levels are low and lower for females compared with males.

With a high rate of documentation involved in the bank procedures for obtaining loans for rearing, as well as in the marketing of cocoons produce to the DCVL, the low rate of literacy adds to the overall vulnerability and lack of information amongst the Dhimar rearing community.

A look at thirteen major steps/operations in tasar activity shows that the tasks are variously distributed

among males, females, male children and female children. (See Chart below). Clearing of forests, protecting larvae and marketing of cocoons call for participation of all adults and children. Among children, female child has more involvement (7 operations out of 13) than the male child (5 out of 13), though the 5 operations in which the male child engages are common to the female child. On the other hand, males amongst adults figure in 9 out of 13 operations as against women who figure in 7 out of 13. Only one activity is exclusive to adult women, that is, putting ash around base of trees.

Chart Showing Tasks Within Rearing and Division of Labour

	<u>M</u>	<u>F</u>	<u>MC</u>	<u>FC</u>
1 Collecting and storing seed cocoons	x			
2 Preparing eggs from seed cocoons	x			
3 Clearing and cleaning of forest rearing site of busy undergrowth, all except the fodder trees	x	x	x	x
4 On hatching of larvae transferring them to fodder trees	x			
5 Transferring feeding larvae from tree to tree when leaves of one tree are consumed		x		x
6 Picking up fallen larvae and replacing on branches		x		x
7 Protecting larvae from birds, parasitic flies and insects from dawn to dusk	x	x	x	x

(continued)

	<u>M</u>	<u>F</u>	<u>MC</u>	<u>FC</u>
8 Patting ash around base of tree to protect larvae from white ants		x		
9 Protect larvae from predators like the local kasturi by using fishing nets as fences and traps - especially during nights	x			
10 Collection of ready cocoons	x		x	x
11 Sorting of cocoons			x	x
12 Marketing of cocoons	x	x	x	x
13 Collection of money from sale of cocoons	x	x		

Notes: M : Male  
MC : Male Child

F : Female  
FC : Female Child

In terms of work burden <sup>men</sup> are involved right through the rearing season. In the beginning of the season approximately 8 hours spent on rearing site, towards the end upto 18 hours spent on site. As for women, if forest site is far from home, e.g. more than 5 km. away - then women get excluded due to distance and only bring meals to <sup>the</sup> site. Generally, women do not rear alone due to the long hours - i.e. 4 am to 8 pm towards harvesting time. In a season promising good production involvement of women and children increases as also that of hired casual labour if family members <sup>are</sup> not sufficient.

## Rituals and Taboos

### Rituals

The field survey revealed that T<sub>2</sub>asar silk-worm is regarded as a 'Maui' or goddess by the rearers who have traditionally believed that "the tazar cocoon produce depends on her divine bounty. The ain tree, which is the traditional fodder tree for silk worm rearing in this region, also assumes a special ritual significance. By virtue of being the host plant of the tazar goddess, it is worshipped in the form of the Devkari Puja at the commencement and conclusion of the rearing season, although the tree in itself holds no sacral value to the Dhimars. At the end of the season, as in the beginning, a fodder tree is worshipped, accompanied by the sacrifice of a fowl and coconuts, both of which are consumed right there. Offerings of vermilion and camphor are made, the period of abstinence from certain activities comes to an end.

However, rituals today are not performed in the same manner and to the same degree of intensity as they were in the earlier days. The origins and the exact ritual significance, however, could not be recalled by the Dhimar rearers. In one of the sample villages, the rearers



said that, just as some people worship the 'Talsi' plant without knowing its ritual significance and origin, they worship the host plants of the tasar silk-worm, the tasar goddess.

While discussing the factors that could be the cause of the present cycle of poor tasar cocoon production and successive crop failures, the rearers hesitantly put forward various reasons. These included possible diseases of the larvae and an adverse change in the climate. However, since they seemed at a loss on how to substantiate these views, they finally attributed the failure of crops to the whim of the goddess. In their present state of partial knowledge, and most often lack of it, the rearers appear unable to maintain a scientific approach to the problem. Unable to combat disease and to discover the precise cause of crop failure, rearers tend to fall back on a belief which has been passed down from generations.

### Taboos

The field survey and general discussions revealed the occurrence of the following taboos, practised to varying degrees by the rearing families during the rearing period:

### Taboos Related to Food & Eating Habits

Within the rearing Dhimar household, the following activities are forbidden during the period of rearing:

- 'Rotis' are not cooked within the household.
- Vegetables are not fried.
- The husk of rice is not burnt.
- Food is eaten on leaf-plates made from leaves of the fodder tree.
- Food is eaten with one hand only.
- Tea is drunk without milk.
- Diet is strictly vegetarian.

### Taboos Related to Men

Men who are actively engaged in rearing activities are required to abstain from the following activities:

- Haircuts and shaves.
- Wearing shoes on rearing site.
- Having conjugal relationships.

Women Specific Taboos

- During the menstrual period women are prohibited from going to the rearing site. It is believed that their presence during this period will cause the larvae to go mad; behave strangely and finally die.
- No ornamentation, 'Kum kum' 'Sindur' (vermillion used as a sign of being married) kazar or bindis are allowed to be worn. The hair is not combed.
- New clothes, especially black cloths are forbidden to be worn at the rearing site.
- During menstrual time women are prohibited to enter the grainage room where the moths are paired. Their presence is believed to destroy the eggs laid by the female moth.

From the responses received to queries regarding the adherence to the prescribed taboos - those specific to women, especially during their menstrual period were adhered to with comparative strictness. However, it was observed that women wore sindur to the rearing site when the outsiders are present, for example, the field investigators. The reason given was that the women did not want to be mistaken to be widows.

In the case of the men some respondents explained that it was essentially due to the heavy work load that they did not find time to shave and keep groomed. Many rearers resume conjugal relationships with their wives whenever they find time to leave the rearing site, which gets especially scarce towards the end of the season. Pointers indicate that taboos are adhered to only in cases where the consequences predicted for not doing so are drastic in terms of the production of cocoons.

#### Socio-cultural Factors VS Tassar Development Pro- gramme

The main features of the Intensive Field Project of the ISTP to be implemented by the DCVL, includes among other inputs, the provisioning of disease free commercial seeds and the introduction of new bivoltine and multi-voltine varieties. The field survey examined the attitudes of the respondents to these inputs, *to gauge the extent of cultural influence in their attitudes.*

#### DfLs

At present the DCVL supplies both seeds cocoons and disease-free layings (dfLs) to the rearers. However, the scope of distribution as of today is limited in the case of

dfls, the distribution capacity hardly sufficient to cover 25 percent of the tasar rearers.) A reluctance has also been observed on the part of rearers in accepting dfls prepared by the DCVL. A common opinion held to explain this phenomena is <sup>that</sup> the religious practices of the target population prevent rearers from taking the dfls from the DCVL since their handling might not be 'clean'.

On closer scrutiny, the survey data revealed that of the 90 responses received to this aspect - the number of users of dfls was only 10 percent, three in Garchioli tehsil and seven in Brahmuri tehsil. This low rate of usage was attributed by 11 respondents on the basis of being intimidated by the bad experience of other rearers who used the dfls, while 22 respondents were afraid to try a new method, their inexperience being the inhibiting factor. Of the remaining 22 respondents of the total of 55 on this subject - 19 respondents felt that incorrect preparation and technical mishandling resulted in the inefficient performance of the dfls. The general opinion held by the rearers revealed that they had little faith in the know-how of the DCVL staff who prepared the dfls since in their experience, more than 50 percent of dfls go waste. It was felt that pairing was done incorrectly, in many cases no fertilisation takes place. It is held amongst the rearers

that pairing should be done at night and not in the day time as it is done by the DCVL staff. A few also felt while pairing, the moths should be covered with a cloth piece.

Only three respondents of the surveyed households felt that it was the contravention of the prescribed taboos that were the cause of their lack of faith in the dfls. In the general discussions, rearers said that the general practice held was that no women during her menstrual period was allowed to enter the room where the pairing of moths was done. This taboo, they felt, was not being adhered to strictly by the DCVL staff at the Amhari seed multiplication centre, where women entered the grainage room unchecked. It was also believed that the presence of disreputated persons have an adverse effect on the eggs. However, even in the discussion, the non-adherence to the taboos was not identified as the major cause of lack of faith in the dfls.

Another feature of the inhibiting factors was the DCVL's practice of washing the eggs with formalin solution. The treatment was looked upon by the rearers as an unnatural practice and therefore unacceptable. They were found to be unaware of the purpose of this treatment.

The general trend that emerged seems to indicate that it is more a lack of faith in the overall efficiency and methodology of preparation of the dfls, compounded by a lack of information, than deep rooted cultural inhibition that explained the several unfavourable attitude towards the dfls.

### Perceptions

#### The rearers' point of view.

Very few Dhimals who rear are literate, especially amongst the older generation. It was observed that the awareness amongst the rearers of the DCVL's tasar development programme, the ISTP, the Banking system and other development schemes was marginal. Information in the hands of the rearers was incomplete and often incorrect. For example, as far as most Dhimals are concerned the loans they receive for rearing are from the 'Mahamandal', i.e., the DCVL. They were unaware of the Bank of India's functioning pattern. The rate of interest paid for the loans taken was another striking feature, wherein, knowledge was very poor, as was also was the case with the loan amounts taken over the years.

On the other hand, the rearers appeared well-informed about the outlawing of the Sabookar, i.e. the local moneylender. But the general feeling was that since Banks do not extend loans to their class of people, they are forced to go to the moneylender who now refuses to give loans to them. As a result, they borrow from the well-off in the village, repaying in kind, though often they will continue to pay a 25 percent monthly rate of interest on the loans.

Rearers reactions to the style and pattern of cocoon purchases by DCVL and comparison of DCVL style with that of private traders (Table 2) have already been noted extensively earlier.

#### Inter-generational Perceptions

The general picture that emerged <sup>was</sup> that inter-generational perceptions of engaging in tasar rearing are on the positive side. The older generation of rearers felt that although tasar rearing was not as productive as in the earlier days, they want their younger generation to continue with rearing, since they have been engaged in it from generations. This view was held by approximate half the respondents. However, not so definite views were expressed



by the others. On the one hand, they expressed their desire that their children be educated and obtain secure jobs, while on the other hand they hoped that they would continue to rear.

In the case of the younger generation, it was observed that those who were literate to some degree opted for other occupations like tailoring, working on a daily wage basis on the ISTP. Due to the high risk factor involved, preference was given to occupations that brought in a fairly regular income. But due to lack of education and any skills besides rearing, they have no option but to rear to tide them over the lean period.

#### Inter-caste Perceptions

It was observed that tasar silk worm rearing as an occupation was regarded by the village at large as a respectable occupation comparing favourably with other occupation. The status of the rearers themselves, though, was defined by their caste ranking. However, the rearers felt that if tasar rearing were to become more remunerative and economically productive, they would command greater respect and would not be treated<sup>as</sup> socially inferior.

The response of the Dhimals themselves on being exclusive to the tasar rearing occupation was reflected in their opinion that although they had no objection to any other caste taking up tasar rearing they were doubtful of the viability of such a venture, since it required a lot of skill and experience. However, were any other caste group to engage in rearing to a relative degree of success, they felt threatened and expressed their resentment at the possibility of being displaced from their traditional occupation.

#### Non-rearers' Perception

Tasar rearing is considered to be a difficult occupation, requiring much skill and patience, and is labour-intensive. Compounding these factors is the poor production levels, especially in the past 3-4 years, which <sup>has</sup> increased the risk element a great deal compared to other occupation. Due to these reasons, many rearers who used to rear have now given it up. Others are scared to undertake rearing any longer. Some landed Dhimals non-rearers are turning more towards cultivation and hope to make an adequate income from the agricultural produce. Due to the present slump in production, others are now engaged in agricultural labour and construction works.

Various other factors link up to the above-mentioned reasons which contribute to making tasar rearing an unattractive occupation to the Dhimar rearers. These include the problems faced by the present day rearers with the forest department and the rearing site, the credit facilities extended by the Bank of India and most of all problem related with the functioning of the DCVL. Low prices, having to commute to the procurement centres and not being given ready cash at the time of procurement, are some of the problems as perceived by the non-rearers.

In terms of incentives to make tasar rearing more attractive an occupation, the non-rearers were of the firm belief that only when these problems are solved and production increases, will the Dhimars return to rearing. The rates offered by the DCVL for the cocoon produce must be more realistic. The same should be the case with the loans disbursed. The forest department should give the rearers ownership rights of the forest rearing plot they have been using for generations. But above all, it was the poor production which had proved to be the biggest deterrent. Even if a high rate were to be offered without an overall increase in the production level, Dhimar non-rearers would continue <sup>not</sup> to rear. Thus, the present slump in production and the mounting debts will have to be dealt with in order to make rearing a more attractive occupation.

Traditional interaction and co-operation  
within the Dhimar community

Village level interactions

At the village level, matters of importance to the village community at large and inter-caste disputes are customarily handled by the village Panchayat. Members of this Panchayat are predominantly men, though in case of the surveyed villages, Chichgaon, a senior woman of the village community had held the position of a 'Panch'. Although the Panchyat is vested with the highest authority within a village, their hold seems to be slackening, especially in the larger villages.

At the caste or Jati level, it is the Mahajan of that caste who holds the final decision-making power. The caste group is considered the most important functional unit.

Rearing is normally done in groups of ten to even twenty Dhimars, of whom the eldest and therefore the most experienced acts as their leader and spokesman. Marketing of the cocoons is generally done together, thus rearers wait until all have harvested in that group and then go to sell their produce together. However, with the present system of marketing introduced by the DCVL, this collective style of operation is on the decline. Now the trend of the rearers coming individually to sell their produce to the DCVL at their procurement centres, is on the increase. This change could be explained by the fact that earlier, when the rearers sold to the private traders, the Gadewars and Kostis, they resorted to collective bargaining to get the best price possible for their produce. Now, with the introduction of fixed prices, the effectiveness of the group approach has diminished considerably.

Within the family, it is the male head of the household, usually the senior-most member who is vested with the ultimate authority. Of the hundred Dhimar households surveyed in the two tahsils, all the households were male-headed ones. The earlier joint family system however is being gradually replaced, in the present generation, by the nuclear family norm, mostly due to economic constraints and deprivation. Along with the existing authority pattern, respondents reported instances when disputes have been taken to the police and finally been resolved in the law courts.

The Dhimar women, in addition to being engaged in economically gainful activity, were observed to take the main burden of domestic work and child care on their shoulders. Though tasar rearing is primarily the men-folks' task, the women contribute to rearing by executing certain specific tasks. The women felt that rearing tasar silk-worms is too strenuous an activity for just the man of the family, therefore, they worked alongside for whatever income was forthcoming. In times when tasar production is expected to be good, the rate of participation of women intensified. It was observed during the field survey, that women often woke at 1 a.m. to prepare food for the men who had to reach the rearing site before dawn. However, Dhimar women did not undertake rearing independently since it involved working in the jungles at odd hours of the day and night.

Socially, of the taboos associated with rearing those specific to women are most strictly adhered to. Decision regarding rearing are made by the men, though in some cases women are sometimes consulted.

Not only is the level of literacy amongst the women alarmingly low, very few young girls are being educated

even today. It was also observed that though alcoholism was not a serious problem, wife-beating was fairly widespread and was socially not frowned upon.

#### Dhimar societies

These societies are old informal institutions - the period of their origin the Dhimars were unable to recall. According to their account, this society is capable of dealing with all Dhimar occupations ranging from agriculture, fishing, tasar rearing, water-wet cultivation to sale of roastgram. Subsidies on loans were also given by the Zilla Parishad through the societies. As regards to its administration, every five to six years the villagers get together and elect their own leaders.

In the course of the field survey - two such societies were encountered - one in Mendki, Brahmपुरi tehsil and another in Adapalli, Garchiroli tehsil. At present it is not playing any role in the tasar rearing occupation.

#### Rearers Co-operatives

No longer functional, these co-operatives were started by the Department of Industries, Government of Maharashtra in the early sixties. In the absence of any marketing programme of the cocoon produce of the rearers, the co-ops of rearers were set up to stem their exploitation by the private traders and to facilitate their collective bargaining for better prices for their produce. The cocoons produced were pooled together by the members of the Co-operative and then auctioned, selling it to the highest bidder. However, when the private traders started conniving, the sericulture scheme of the Department of Industries sent circulars to other big concerns dealing in tasar in order to maintain the competitive prices offered to the rearers.

In addition to sharing the profits, the society was also responsible for obtaining the forest rearing site on

a lease-hold basis from the Forest Department. The Department of Industries' role was strictly that of advisers and supporters. However, these societies gradually started malfunctioning, running into losses for having sold on credit, and in some cases, due to underhand dealings with the private traders and overall corruption.

In 1973-74, the DCVL procured the tasar cocoon produce from the rearers at a fair price - marking the advent of the DCVL into the rearing sector.

The Kosa producers Co-op Society at Armori, in 1974-75 suggested to the DCVL that the society would sell cocoons collectively to the DCVL on the condition that whatever the rate fixed, the society would charge a commission of Rs.5 per Khandi<sup>\*</sup>, the rest being given to the rearers. The DCVL turned down this offer since the society earlier had not paid the rearers, nor had paid the royalty money to the Forest Department which it had collected from the rearers. But essentially, the underlying rationale of the DCVL in refusing to revive the co-operative system seemed to be based on the assumption that DCVL was now offering a "fair price", a steady market and had effectively eliminated not only the private trader but also the rationale for a cooperative of rearers.

Discussions with the rearers in this issue revealed that earlier they tended to conclude that the DCVL was a cooperative but are not aware that it is not one. Some rearers expressed the view that there should be cooperatives, run on lines similar to the 'Machhipalan Sahkari Sansthan' or their fishermen's cooperatives, for then they felt that at least some of the profits made by the DCVL would accrue to them.

\* 1 Khandi = 4000 cocoons

Others, especially those who recalled the performance of the cooperatives earlier, were skeptical of its success in the future.

It was found that at present there is no collective organisation of the rearers to represent their interests. The rearers too feel the absence of such a union. Keenly as they feel that as they stand divided today, they have no collective strength to back their demands. They expressed the view that only when 10-15 villages get together would their voices be heeded to, be it by the DCVL or the Forest Department.

Another report obtained from the DCVL on the attempt to organise the rearers revealed that around three years back Mr. Rote from the District Cooperative Society (Bhandara) had tried to organise the rearers, but the effort had finally fallen through. The reasons for its failure was not known to the DCVL.

On the 7th of January 1982, a "Tasar Producers and Fishermen's Meet" was organised and attended by 1000 Dhimars according to the organising committee report as against 250 as estimated by the DCVL officials. The rally was presided over by some local leaders. Their demands were as follows:

- stop abrupt felling of Ain trees for agricultural purposes. Start immediate cultivation of Ain trees.
- The DCVL should declare the procurement price before purchase of produce from rearers.
- The IRDP subsidy should be extended to all rearers in all the villages in all the respective blocks, as against the present system where only a selected number of blocks are benefitting.
- Dhimars should be classified as Scheduled Castes in order to be eligible for a 50 per cent subsidy.



- A strong lobby of the rearers should be formed.
- The virtual monopsony of the DCVL should end.
- Benefits should also be made available to Dhimar fishermen in the form of loans at a differential rate of interest of 9 per cent. Building of tanks and fish nurseries by the government through the fishermen's cooperative societies and the representation of fishermen on the Zilla Parishad, Cooperative Banks and the District Planning Board.

#### Fishermen's Cooperative Society

A case study was done of the 'Sarvodaya Machhindra Sahkari Society' in Mendki, Registry Number 1096.

It has a total membership of 133 Dhimars, each paying a life membership fee of Rs.11.

The society pays a royalty for the fishing tanks, taken from the Irrigation Department, at the rate of Rs.10 per acre. The society is responsible for the purchase of fish seeds, which are then taken care of for three years after which the Dhimars are allowed to fish.

Whatever the individual haul, the fish is pooled together and marketed. The society's commission ranges from Rs.1.50 to Rs.0.25 per kilo fish from which the pay of the Secretary is arranged.

Although eligible for taking loans from the Government, the Society at present manages within its existing pattern.

The society has solved the problem of right to fish, since it now gains official permission to use a particular tank. Earlier, the fisherman had to hand over 1/2 the haul to the Malguzar. Now, however, after the society substracts its commission - each fisherman gets an equal share and his average daily income ranges from Rs.2 to Rs.5.

Table 1 - Achievements of the DCVL's Tasar Silk Programme

<u>Particulars</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>
Cocoons reared and purchased (Nos. in lakhs)	15.69	87.25	17.54	61.00	100.00	38.70	50.05	61.92
Its value (Rs. in lakhs)	0.57	4.17	0.81	4.00	9.98	2.97	5.67	6.35
No. of handlooms working	2	25	38	57	75	126	126	130
No. of artisans provided with work in pre-weaving and weaving sectors	75	150	250	450	500	730	730	800
No. of rearers engaged in rearing	500	900	700	900	1,200	1,500	2,000	2,400
Production of Tasar Cloth (in meters)	31	9,319	16,502	23,000	39,800	75,353	57,636	76,212
Sales of fabrics and raw material (Rs. in lakhs)	-	0.34	1.81	5.09	9.69	17.18	9.32	19.65

62

**Table 2 - Rearing Views and Perceptions of Linked Institutions/Schemes\***

Tehsil	Land (acres)	Policy or hectare of Plantation per Rearer		Price given by DCVL		Amount Expected (Rs.)	Preference		Dev. Schemes	
		Satis- fied	Not Satisfied	Satis- fied	Not sa- tisfied		DCVL	Private Traders	Non- Users	Users
Garghirol	Landless	5	13	0	17	700	5	7	11	0
	0.1-2.5	4	22	0	27	723	10	16	18	0
	2.6-5.0	1	5	0	6	545	2	4	6	0
	5 & above	0	1	0	1	700	1	0	0	0
Brahmpuri	Landless	9	13	4	18	783	17	2	21	0
	0.1-2.5	7	15	0	21	719	16	2	20	3
	2.6-5.0	1	3	0	4	750	3	1	6	0
	5 & above	0	1	0	1	1,000	1	0	1	0
<b>Total</b>		<b>27</b>	<b>73</b>	<b>4</b>	<b>95</b>	<b>-</b>	<b>55</b>	<b>32</b>	<b>53</b>	<b>3</b>

**Note:** \* The number of responses given here are from 100 households surveyed in the two tehsils.

**Table 3 - Production and Value of Cocoons Purchased by the DCVL from the Vidarbha Region: Measure of Fluctuations in Total and Per Capita Quantities\***

<u>Year</u>	<u>Cocoons Produced and Purchased</u>	<u>Value (Rs.)</u>	<u>Number of Rearers</u>	<u>Per Capita Production</u>	<u>Per capita Value (Rs)</u>
1973-74	2,569,525	57,834	75	20,927	771
1974-75	8,725,535	415,158	150	58,170	2,781
1975-76	1,754,815	89,886	250	7,019	360
1976-77	6,202,672	417,273	450	13,784	927
1977-78	8,196,000	697,410	500	16,392	395
1978-79	3,819,010	261,741	730	5,232	359
1979-80	3,842,470	379,241	730	5,264	520
1980-81	4,461,380	363,160	800	5,577	454
Mean	4,821,426	335,213	461	16,546	944
Co-efficient of variation	0.52	0.57		1.01	0.81

**Note:** \* : The first three columns are reproduced from the DCVL Report entitled *Tasar Silk Project of the DCVL, Nagpur.*

**Table 4 - Alternative Scenerions in the Event of a 20% Rise in the Weaving Charges for Un-processed Tassar Gaicha Cloth from Rs.5/- per metre to Rs.6/- per Metre**

	<u>Current Position</u> 1	<u>Rs.1/- deducted from the cost plus margin, price kept constant</u> 2	<u>Rs.1/- added to cost, with full incidence shift- ed to consumers</u> 3	<u>Price Raised by Rs.1</u> 4
Labour cost for weaving	5	6	6	6
Total cost per metre	Rs.31.28	Rs.32.28	Rs.32.28	Rs.32.28
Price per metre	Rs.40.66	Rs.40.66	Rs.41.96	Rs.41.66
Wages as a % of price per unit	12.30%	14.76%	14.30%	14.40%
Cost plus margin	30%	25.96%	30%	19.05%
Administrative expenses as a % of price	3.46%	3.09%	3.46%	3.35%
Profit as a % of price per metre	19.61%	17.52%	19.61%	19.14%

Table 5 - Villages, No. of Dhimar Household Surveyed - Across the Land Classes

<u>Tahsil</u>	<u>Sample Villages</u>	<u>Total No. of Dhimar House- holds as id- entified by the DCVL</u>	<u>No. of Dhimar Households Engaged in Tasar Rearing as identified by the DCVL</u>	<u>No. of Dhimar Households engaged in rearing Selecting in Sample</u>				
				<u>Total No. of H.H Selected</u>	<u>Land Less</u>	<u>(In Acres)</u>		
					<u>0.1 to 2.5</u>	<u>2.5 to 5.0</u>	<u>to Above 5</u>	
Garchiroli	Kodgal	35	21	20	4	12	3	1
	Ranamulze	50	39	20	9	9	2	-
	Porla	25	6	6	3	3	-	-
	Mandatola	15	5	4	1	1	2	-
Brahmpuri	Mendki	60	44	20	9	9	2	-
	Gogaon	30	22	20	9	8	3	-
	Baradkinki	10	3	3	-	1	2	-
	Chichgaon	15	6	7	2	4	-	1
	Saigaon	-	-	1	-	-	-	1
<u>Total</u>	<u>8</u>	<u>290</u>	<u>148</u>	<u>100</u>	<u>37</u>	<u>47</u>	<u>14</u>	<u>3</u>

Table 6 - Number of Households and Population in the Sample - by Land Classes

<u>Tehsil</u>	<u>Land Class (In Acres)</u>	<u>Total No. of Households Surveyed</u>	<u>Total Population Surveyed in these Households</u>	<u>Males</u>	<u>Females</u>
Garchiroli	Landless	17	76	40	36
	0.1-2.5	25	148	71	77
	2.6-5.0	7	46	22	24
	5.0 & Above	1	10	6	4
Brahmpuri	Landless	20	111	59	53
	0.1-2.5	22	120	64	56
	2.6-5.0	7	46	24	21
	5.0 & Above	1	10	6	4
	<u>Total</u>	<u>100</u>	<u>567</u>	<u>292</u>	<u>275</u>

Table 7 - Average Family Size Across Land Classes

<u>Land Holding</u>	<u>Garchiroli Tehsil</u>	<u>Brahmpuri Tehsil</u>
Landless	5	6
0.1 to 2.5 acres	5	6
2.6 to 5.0 acres	8	7
More than 5.0 acres	10	10

Note: The numbers represent the average family size in each land class.



**Table 8 - The Percentage Distribution of Workers According to Land and Activity for the Sample Households**

<u>Tehsil</u>	<u>Land Class (In acres)</u>	<u>Total Workers</u>	<u>Taser Rearing</u>	<u>Agricultural Labourers</u>	<u>Fishing</u>	<u>Cultivators</u>	<u>Cattle Grazing</u>
Garchholi	1) Landless	59	47.5 (28)	49.2 (29)	33.8 (20)	-	5.1 (3)
	2) 0.1-2.5	139	68.5 (95)	33.8 (47)	12.2 (17)	20.1 (28)	3.6 (8)
	3) 2.6-5.0	42	16.6 ( 7)	11.9 ( 8)	9.5 ( 4)	9.5 ( 4)	7.1 (3)
	4) Above 5.0	29	100 ( 9)	-	11.1 ( 1)	33.3 ( 3)	-
	5) <u>Total</u>			(139)	(81)	(42)	(35)
Brahmapuri	6) Landless	101	52.5 (53)	36.6 (37)	16.8 (17)	-	8.9 (9)
	7) 0.1-2.5	100	43.0 (43)	39.0 (39)	22.0 (22)	26.0 (26)	4.0 (4)
	8) 2.6-5.0	37	21.6 ( 8)	29.7 (11)	21.6 ( 8)	29.7 (11)	2.7 (1)
	9) Above 5.0	10	40.0 ( 4)	-	-	30.0 ( 3)	-
	10) <u>Total</u>			(108)	(87)	(47)	(40)

**Notes:** 1 As the same worker was engaged in more than one activity, the percentage of worker, when added up works out to more than 100.

2 The population represented in the table <sup>is</sup> 9 years and above.

3 Brackets are numbers of respondents.

4 The definition of the worker was the usual status and the period of reference was the past one year.

**Table 9 - Proportion of Workers by Age and Sex Within Each Activity and Land Class**

<u>Tehsils</u>	<u>Taser</u>			<u>Agricultural Labourers</u>			<u>Fishing</u>			<u>Agricultural Cultivation</u>			<u>Cattle Grazing</u>		
	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>	<u>M</u>	<u>F</u>	<u>C</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
<b><u>Garehivoli</u></b>															
Landless	57.1	39.3	3.6	41.4	58.6	-	95.0	5.0	-	-	-	-	-	-	100
0.1-2.5	43.1	34.7	22.1	40.4	46.8	12.8	100.0	-	-	67.8	17.8	14.3	80	-	20
<b><u>Brahmouri</u></b>															
Landless	47.2	32.0	20.7	40.5	54.0	5.4	100.0	-	-	-	-	-	-	-	100
0.1-2.5	58.1	30.2	4.7	35.9	41.0	23.1	95.8	0.5	-	80.6	11.5	7.7	-	-	100

**Notes:** M : Males; F : Female; C : Children - in the age group of 6 to 14 years.

As the small size for landclasses above 2.5 acres is too small, it has not been included here.

Table 10 - Average No. of Days<sup>1</sup> Spent on a Specific Gainful Activity in a Year by the Sample Household Workers.

<u>Tehsils</u>	<u>Tassar</u>	<u>Fishing</u>	<u>Agricultural Labourers</u>	<u>Agricultural Cultivation</u>	<u>Cattle Grazing</u>
<u>Gerehroli</u>					
Landless	117 (12)	169 (28)	139 (33)	-	360 (1)
0.1 - 2.5	120 (22)	147 (24)	179 (38)	176 (25)	313 (5)
2.6 - 5.0	120 (6)	180 (8)	144 (7)	176 (10)	362 (2)
5.0 & Above	-	-	-	-	-
<u>Brahmpuri</u>					
Landless	174 (18)	112 (25)	177 (33)	-	364 (2)
0.1 - 2.5	136 (18)	146 (23)	164 (37)	117 (18)	213 (4)
2.6 - 5.0	138 (6)	127 (7)	130 (3)	142 (11)	360 (1)
5.0 & Above	-	-	-	-	-
<u>Average Days</u>	<u>144.80</u>	<u>152.24</u>	<u>161.09</u>	<u>153.56</u>	<u>305.93</u>

Notes: 1 As the days spent on one activity were also used for other activities simultaneously, there is an overlap of number of days in a year for different activities.

2 Figures in brackets give the numbers of workers who responded to the question for each gainful activity.

3 The average number of days engaged in a particular occupation was calculated on the basis of the estimated responses (in terms of days or months) of the working population in each land class.

Table 11 - Average Hours Spent in Tassar Rearing in Season

<u>Tehsil</u>	<u>Land Classes (In Acres)</u>	<u>Male</u>	<u>Female</u>	<u>Children</u>
Garchiroli	Landless	15	10	14
	0.1 to 2.5	14	8	9
	2.6 to 5.0	16	13	12
	5.0 and above	14	9	-
Brahmpuri	Landless	16	16	9
	0.1 to 2.5	13	8	8
	2.6 to 5.0	11	7	8
	5.0 and above	10	8	-

Note: Data was collected over January and February, when rearing gets most intensive, on the basis of recall method. This was confirmed by observation in certain cases.

Table 12 - Average Monthly Income<sup>1</sup> from Selected Occupations by Land Classes

<u>Tehsil</u>	<u>Land class (In Acres)</u>	<u>Tassar Rearing</u>	<u>Fishing</u>	<u>Agricultural Labour</u>
Garchiroli	Landless	57	79	76
	0.1 to 2.5	84	78	64
	2.6 to 5.0	93	76	86
	5.0 & Above	-	90	-
Brahmpuri	Landless	42	68	68
	0.1 to 2.5	36	60	73
	2.6 to 5.0	64	72	67
	5.0 & Above	30	-	-

Notes: 1 Income is calculated in Rupees.

2 Since cultivation and the allied activities like cattle grazing are mostly of a subsistence nature, the income from these occupation could not be estimated reliably, therefore they were ~~com~~puted.

3 Refer to Appendix I-3 for techniques of estimation of incomes.

Table 14 - Sex Specific, Number of Literates and Illiterates Among the Sample Population by Land Classes

<u>Tehsil</u>	<u>Land Class (In Acres)</u>	<u>Illite- rates</u>		<u>Primary School</u>		<u>Middle School</u>		<u>High School</u>		<u>Non- Formal Educa- tion</u>		<u>Total No. of Liter- ates</u>		<u>Total Popul- ation</u>	
		<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>
Garehiroli	1) Landless	28	35	6	1	1	-	-	-	5	-	12	1	40	36
	2) 0.1 to 2.5	67	77	-	-	1	-	1	-	2	-	4	-	71	77
	3) 2.6 to 5.0	17	24	1	-	-	-	1	-	3	-	5	-	22	24
	4) 5.0 & Above	3	2	1	1	1	1	1	-	-	-	3	2	6	4
	5) <u>Total</u>	<u>115</u>	<u>139</u>	<u>8</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>-</u>	<u>10</u>	<u>-</u>	<u>24</u>	<u>3</u>	<u>139</u>	<u>141</u>
Brahmpuri	6) Landless	50	52	5	1	1	-	1	-	1	-	8	1	58	53
	7) 0.1 to 2.5	51	56	6	-	1	-	1	-	5	-	13	-	64	56
	8) 2.6 to 5.0	14	19	3	1	2	1	3	-	2	-	10	2	24	21
	9) 5.0 & Above	5	4	1	-	-	-	-	-	-	-	1	-	6	4
	10) <u>Total</u>	<u>120</u>	<u>131</u>	<u>15</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>5</u>	<u>-</u>	<u>8</u>	<u>-</u>	<u>32</u>	<u>3</u>	<u>152</u>	<u>134</u>

\* able to sign ones names.

## IV

Putting the Two Together

As the foregoing review shows, the programme and the people for whom it is meant have yet to come together in a meaningful, understanding and enduring relationship.

Notice, for example, that the policy relating to the programme is being made at all levels; central, state and the DCVL, but the people are not involved at any stage. The rearers were found to be unaware of the policy of the inter-state tiger project relating to "one hectare plantation per rearer". Villages near the plantation sites knew about the nurseries but were unaware of their purpose.

The picture is no different at the implementation level. According to ISTP project document rearers are to be assigned the plantations area after two years of plantation but were to be involved from the start in the raising of the plantations. But our sample population revealed that very few active rearers were involved. The good reasons why this could not be done have been recorded

earlier as explained by DCVL that the rearers were busy with the fish season or due to lack of clear understanding with the forest department. But the fact remains that the implementation of the project is being carried out and continued without any dialogue with those for whom it is intended. The community is also not consulted in the selection of the poor to be benefitted under the project.

The danger therefore is that the project may get implemented as per schedule but might not succeed in delivering its benefits to those on its priority agenda. Furthermore, some of the plantations are being developed more than 5 kms distance from the dwelling places. This is bound to exclude women from the rearing process. DCVL did not appear to be even aware of such a consequence.

If the project continues to be planned and implemented without the participation of the people, as at present, it may succeed in producing high quality tasar but it is dubious whether it would succeed in raising the quality of life of the people it has so eloquently vowed to serve in its statement of aims. The weaving together of the programme and the people is fundamental. It is necessary to broaden the present limited sphere of



inter-action between the DCVL and the community of rearers. Presently the relationship is that of a producer and a buyer. The only fact which the rearers perceive in this relationship is that since they are able to take a loan they must sell their produce to the DCVL. DCVL's helpful 'gesture' in securing bank loans is 'duress' in their eyes. A fairly general under-current among them is that "we are illiterate, literate people do not treat us with respect". They also feel that there is no scope for their real participation in the project policies because no one will listen to them.

It is true that at certain points the distinctive social and cultural features of the Dhimar community come in conflict with the tassar development project. But a closer scrutiny reveals that, as in most cases, the so-called cultural inacceptability stems not so much from socio-cultural roots as from a general lack of information and ignorance about the project aims and details. To attribute the cause of friction to the ignorance of the rearers alone would be looking at just one side of the coin. The other aspect which is instrumental in aggravating these points of friction is the lack of sensitivity of the programme itself to the reactions of the beneficiaries and almost complete lack of communication with them.

For example, as is observed in the case of "inacceptability" of dfls by the rearers, the dominating reason is not a cultural prejudice but the poor performance and quality of the dfls. The rearers attribute the poor quality to imperfect fertilisation, saying that more than 50 percent of the eggs do not hatch. What is the effective rate of rearing of the dfls? What level of productivity should the rearer expect? Answers to none of these queries are known to the rearers.

Again, they have no prejudice against the new varieties of Daba and Sukinda hybrid which are being introduced, rather they suggest a more scientific approach that if any new technique or treatment for any disease were to be applied, it should first be experimented on one tree of worms and if successful introduced to the rest. This and several other suggestions made by them, which follow, clearly reflect their anxiety to relate themselves to the programme more extensively and intensively.

For example, the rearers identified three major spheres which need attention. The forest rearing site, loans for agriculture in addition to loans for rearing, and supply of assured quality of seed cocoons and dfls. They also expressed interest in learning how to spin and reel cocoons, though traditionally they had never done so, since they felt they would earn more (the project aim) by selling yarn instead of such cocoons.

They also want the project to organise adult education classes for them which should have direct bearing to their professional lives, for example, training in simple account keeping. The younger generation feels that night schools would serve their needs better. For they believe that if you wish to attend school in the day, it will be at the cost of going hungry. The pressing need to earn a living for survival deprives the individual from attending formal school, and those who do make time, drop-out at the primary school level itself.

While tasar and agriculture are seen as potential means of improving their standard of living by most, some of the respondents to the field survey saw no hope at all. If the present trend should continue, they too would give up tasar rearing as other Dhimar non-rearers have done. An observation was made of a mix of feelings of fatalism on the one hand and a more progressive and hopeful frame of mind on the other amongst the rearers. But with the successive poor crops, the fatalistic attitude shows signs of being on the increase.

Thus, the future of ISTP depends to a large extent on the faith the rearers have in its success and scope for improving their lot. It is here that the communication

component of IBTP, which is practically non-existent, has a crucial role to play in establishing credibility and laying the foundations of successful teaar development project.

In Mandli, Brahupari tehsil, a group of enthusiastic Khisari were discovered who are already engaged in theatre, for the purpose of entertainment, but would be open to faciliate issues of direct relevance to their lives. For the project this could be a powerful channel of communication with the community.

It needs to be emphasised that the DVL officials are as devoted public servants and as competent project managers as one can find. Their qualities are not in question. What is in question is the nature of relationship established between the programme and the people. That calls for a basic change. For example, one of the senior officers when apprised of the discontent against the rearers who were told by a junior officer either to "comply with DVL policy or get lost", reacted seemingly quite politely that so far as their demands are concerned, these can be put forward through the field officers, and we will look into them. These attitudes are characteristic of an arrangement in which decision-making is concentrated in every one except those who provide the very *raison d'être* for the entire investment and effort.

It can rightly be argued that it is a mass programme involving thousands of rearers and how is the programme administration to relate itself to such a mass. The answer is obvious that even as the administration requires a structure and an organisation to express its commands and have them translated into practice, similarly the community has to be helped to develop an instrumentality which is representative and subject to popular control, *to enable it to interact with the administration.*

The moment seems ripe for the programme and the people to join hands. Interestingly, both DCVL and rearers are considering joint dialogue with the forest department officials and banks to come to a better understanding. There is talk of a conference before the commencement of the rearing season, followed by bi-monthly meetings preferably at the various rearing sites themselves, to consider plans, problems related to credit, control of disease afflicting silk worms, techniques of improved rearing methods etc. This would also help to stimulate local leadership on a significant scale.

This good start can be carried forward to seek and establish long term institutional framework for a harmonious marriage of the programme and the people. As mentioned earlier, the study looked at the background of the Dhimar

community and its common and cooperative endeavours for socio-economic emancipation, to identify the scope for building such an instrumentality for this programme ~~and~~ to enable it to act in unison with the community.

The study found that the Dhimars have close community affinity. Their mutual cooperation is also expressed in institutional forms with long history. Most important of these are the informal Dhimar societies whose prime area is "samaj", that is, regulation of their social conduct and mutual social obligations and general advancement of their "backward" community per-se and vis-a-vis other communities.

In economic sphere, they have developed fishermen's cooperatives (formally registered bodies) which take ponds/tanks on lease from the authorities. The fish is however sold to traders. In certain areas fishermen's cooperative have also set up temporary bridges over the nullahs/rivers in the area and are authorised to collect a charge from users - vehicles, carts, bicycles, etc. The need and area of cooperation in the fishermen's cooperatives is objectively determined and limited by several factors. One, the policy preference for leasing ponds/tanks to cooperative of fishermen. Two, traders contracting in advance the output of fish. The subjective cooperative spirit of the Dhimars is called

upon to play the minimum role here. Nor is the burden of management heavy since the production facility namely the pond/tank is fixed in location and traders come to the site to buy.

The Dhimars or rearers also formed several formally registered cooperatives motivated by a desire "to obtain a fair price" from the traders who until recently dominated the cocoon market. The economic compulsion of getting a fair price was strong enough to give these cooperatives a good start. The membership response was encouraging. But these cooperatives thrived only for a short period and are now lying defunct. The reasons for their collapse have been listed. But objectively the most crucial reason for their failure is that there was no supporting "mother" or apex organisation to guide these primary cooperatives in their formative period and help them in membership education, management and marketing. These are well recognised conditions precedent to the success of <sup>Cottage Workers</sup> cooperatives of the weak and the illiterate. What about the revival of the cooperative effort?

Several changes have occurred in this period which have a bearing upon the prospects of the revival of tasar production 'cooperatives'. One, the dominance of the private merchants has since been reduced if not <sup>down</sup> <sup>to</sup> <sup>zero</sup>. The DCVL

now buys about 95 percent of the cocoons produced in the area. Unlike Karnataka, there is no law in force in Maharashtra regulating the purchase and sales of cocoons.

Thus the sale of cocoons by the rearers to DCVL in preference to private traders and despite bank loan <sup>condition</sup> does imply preference for (DCVL) <sup>a</sup> public marketing <sup>body</sup> ~~body~~. The effect of this is the diminution of the urge ("to obtain a fair price") which initially led them to form cooperatives.

Two, the societies have not been able to recover from the heavy financial loss incurred because of the alleged cheating by traders and mutual suspicion. More importantly, the traumatic experience of having been cheated by the traders is perceived by the members as their lack of ability to manage a cooperative as also the unsuitability of cooperatives as helpful instruments for solving their problems.

Whether this psychological set-back can be erased over time is difficult to predict and would depend on a variety of factors. One of these is the assumption of a promotional role by a development agency pending the take over of the management by the membership. The DCVL has all the elements in it to qualify as a "Mother (Apex) Cooperative" to revive and foster the growth of the rearers primary cooperative. What is needed is for the DCVL to agree to play such a role for the revival of the rearers cooperatives.



*getting together of the*  
 The rearers, the recipient of the project services, is a basic condition for the people and the programme to come together. The other necessary condition is for the project administration to bring its physical presence closer to the project population. In getting closer to the project population, physical communications and decentralized extension network have a vital place. In Chandrapur district villages remain inaccessible for long periods during the rainy season for lack of a bridge between Brahmapuri and Garchiroli. A bridge is a must.

Besides, a decentralized extension service with a network of sub-centres could be built around each demonstrator provided under the ISDP. A sub-centre with physical facilities could be conceived of as serving 50 rearers to ensure easy access and to ensure availability of demonstrators within their own area of work. Similarly DCVL could institute sub-centres for groups of villages depending on forest rearing sites falling within a prescribed radius. This would, in turn, cut out the need for the rearers to commute long distances to the existing centres, often at the cost of precious little time and money. These sub-centres would serve as the hub of administration and implementation, and can be linked to their technical parents through periodic communications.

Finally, to create the conditions necessary for such a participatory development it is essential to effect some short and long term modifications in IPT as also in the sericulture development set up in Maharashtra and in DCVL's role, outline in the next chapter which, if accepted, will help the revival of cooperatives of rearers on the one hand and satisfactory implementation of the programme on the other.

## SUMMARY OF FINDINGS AND POLICY IMPLICATIONS

### Consistency with culture

Tassar silk production starting with the rearing of the silk worm is indigenous to parts of Chandrapur district. The rearing of the silk worm has been one of the traditional occupations of a community called the Dhimars who have been listed as a nomadic tribe by the State Government.

Historically, the Dhimars are descendants of a primitive non-aryan tribe. A large number of gonds have adopted the title of Dhimar or Bhoi, the latter being considered an honorific title in the Central Provinces, and thus have incorporated themselves in the Dhimar category (Crooke 1974). Classified according to occupation, they were originally palanquin bearers, cooks and fisher folk.

Today in their self-perception they do not identify themselves as closely with tribes such as the Gonds though historically they are traced to the Gonds. They consider themselves a caste with the highest status within either tribals or some of the other scheduled castes. This status is derived from their having participated in services which demand close socialisation such as being cooks and palanquin bearers.

Though they live in identifiable clusters of homes within the village they do not exhibit the kind of anthropological characteristics, if one may say so, of pure tribals. There is much more inter-mingling within the village between the Dhimars and the rest of the communities, their clothing also does not visually support them and finally they are not a forest based community. In other words tribals living in forests would be depending on forest produce for many of their activities including income earning activities. But the Dhimars are only marginal forest users. In this sense also they are different from typical tribals.

On the other hand one of their main occupations is cultivation. They are either marginal or small farmers and landless agricultural labourers. They grow rice mainly for self-consumption. Their second main activity is fishing. Traditionally they have fished in ponds through a system of cooperative leasing of the pond. Most of the fish is marketed. Tasar cocoon rearing then is the third activity. It is usually limited to a period of two months of intense work though the cycle from seed preparation to harvesting the crop of cocoons may take a major part of the year.

The Development Corporation of Vidharba Ltd. which is the project implementation authority for the ISTP in Maharashtra State has mainly concentrated on these traditional rearers for implementing the project. Hence concentrating on the Dhimar community and its socio-economic profile, its response and its hopes in relation to the ISTP is quite valid.

Given that the Dhimars are not a strictly anthropologically bound tribal community; not deeply involved in a forest culture; nor mainly concentrating on rearing of cocoons; one of the earlier sensitive questions of the SDC namely, whether the new development project focussing on tasar is likely to have any adverse effect on tribal culture is superseded by other more economic questions.

On the other hand it could be said positively that the idea of strengthening the participation in tasar cocoon rearing is a culturally appropriate idea and, if anything, would add to the quality of life of the Dhimars as they cherish their participation in this activity.

#### The Arjun Plantation

Given that the aim of the ISTP is to increase production of tasar silk in the country through intensive development of traditional tasar areas which are usually tribal concentrations, the focus of providing special plantations specifically and solely meant for rearing the cocoon is also a sound and practical idea.

With the usual process of time, forest lands especially jungles are diminishing, density and growth of population is increasing the pressure on the land and the access of the Dhimals to the Ain trees on which they traditionally nurtured the silk worm is shrinking.

Further, rearing of the silk worm on a dispersed and somewhat disorganised forest land, exposed to various threats both of wind and rain, pests and thefts, the risk in harvesting a good crop were great.

But more than all <sup>there</sup> this is the pressure from central policy to conserve forests which has made the forest departments perhaps over vigilant to the fairly gentle use of the Ain trees by the traditional rearers. In view of these circumstances, the idea of cocoon rearing in reserved special plantations would go a long way to reduce all these risks including the harassment.

The project envisages giving leasehold of 1 hectare of newly developed Arjun plantation per traditional rearer. In Chandrapur district the project aim is to have 500 hectares of plantation. There are estimated to be 3500 traditional cocoon rearers in the district. Therefore this project which is to be spread over 5 years 1980-81 to 1985-86 with the plantation ready for use around 1983-84 intends to cover about 10-15 per cent of the cocoon rearers. The others would continue to use the Ain trees in the forest.

Even given that the new plantation-based rearing can only cover a small percentage of the cocoon rearers certain aspects of the plantation project are worth noting before it is too late.

For example the distance of the new plantations from the village. In Brahmpuri tehsil, the 150 h Mendki plantation is more than 5 km away from 3 of the 4 sample villages. In comparison, Ain forests are normally less than 5 km away.

Though traditionally during the peak rearing season, men of these families almost live in the jungles to supervise the growth of the cocoon to prevent its mauling by birds, nocturnal predators or natural calamities, distance is a problem. There is a lot of servicing by the families at this time especially by the women and the children. It is possible that women will not be able to deliver food or participate as they used to in transferring the larve to the branches and similar other processes due to the distance from their homes.

Another aspect of the change from the Ain tree jungle based tasar crop harvesting and the Arjun plantation would be the fuel wood component. While the Dhimals usually buy their fire wood from other forest based communities, it is also true that in the earlier form of rearing, small Ain branches are cut to facilitate transfer of larve from one fodder tree to another. Later these branches are used as fuel. The forest rearing site is cleared of its undergrowth and shrubs which cannot serve as fodder trees. This is also used for firewood. Even as long ago as in the colonial period the royalty charged by the forest department was 50 paise per acre per annum, which included 25 paise for feeding larve and 25 paise for cutting small branches later used as fuel. Now the fee has been raised to Rs 5 but the forest guards and authorities do not clearly understand that cutting these branches is a part of the process and has been traditionally done and regularised, and is included in the fee levied by the forest department. When the Arjun plantation substitutes the Ain tree, there is no doubt that the fuel wood coming in the form of small branches, will shrink. The Arjun trees are planted in a 4'x4' configuration, such that the branches of neighbouring trees overlap. This will facilitate the larvae to crawl onto the next tree once the leaves of one tree are consumed, thus negating the need to cut branches. In one hectare there will be 6800 Arjun trees and it is not possible to plant any fuel wood trees alongwith them because that will attract birds and will be deadly for the larve.

The only answer is fuel wood plantations within the village under the social forestry programme. ISTP has so far not paid any attention to this aspect. What is needed is pressure on the concerned authorities for simultaneous implementation of the social forestry programme to increase the local availability of fuel wood for the households.

#### Dependence on Ain trees

The overall project of improving tasar silk production on the one hand, increasing the income from tasar of traditional rearers especially tribals (estimated to increase from Rs 400 for the two months activity to Rs 2000 due to the project) depends on a joint base of new Arjun plantation and traditional Ain forests, as mentioned before. Hence it is important to look at the existing situation for the Dhimars in relation to the use of forest.

As mentioned earlier the forest department officials do not have the necessary awareness that the lopping of small branches is part of the traditional rights of these tribes and castes. There is a great deal of harassment which gets intensified not only due to the ignorance of their rights; lack of an organised collective voice of the Dhimars and other forest users; but also the view of functionaries that these are ignorant superstitious people. There is need therefore to build up awareness on both sides.

In fact the forest and its use being the lynch-pin of the cocoon rearing programme, it is extremely important that the intelligent and supportive participation of the forest department is solicited and under-pinned right from the highest level of the Inspector General of Forests through the Chief Conservators down to the District Forest department. It is the rationalisation of forest policy which could lay the most vital foundation to the strengthening of their cocoon production programme.

Discussions both with rearers and with DCVL officials continuously identified the lack of cooperation of the forest department as one of the greatest hurdles for the implementation of the programme. It was reported during the field survey that there had been felling of forests in which the Dhimars have traditionally nurtured the cocoons. The rearers had expressed collective protest;

they had appealed to the DCVL. The rearers expressed the view that DCVL had not sufficiently taken up this cause; the DCVL felt that the forest department had been indifferent to their pleas.

(i) Hence legal safeguards have to be built into the project details such that each rearer is given the challan officially sanctioning him to use the forest rearing site for which he has paid the royalty. With this official document, the rearers have a legal right to protest encroachment on their rearing sites. Prompt and strict action should also be taken by the forest department to check the felling of these forest areas which have been earmarked for rearing. In addition, the functionaries of the forest department should be made aware of the overall policies and decisions.

(ii) The Central Silk Board and the ISTP must incorporate representatives from the forest department in their project implementation committee and build in the necessary safeguards and sensitivities and priorities between different users of the forest in project areas.

Co-operative fish:  
The Dhimars, for their fishing activity, have used some form of cooperative organisation for leasing the water source, namely the pond. According to the practice the department of government leases out the pond on a contract basis to fishermen's cooperatives and provides them with fish seed.

While there is some doubt about the genuineness of these fishermen's cooperatives - in many parts of India including Assam and U.P. it is well known that this modality is mis-used by contractors who mobilise the ignorant, poor, illiterate people, take signatures, register false cooperatives and employ them as labourers for fishing, and reap the benefits of the scheme. There is a likelihood that the Dhimars cooperatives in Chandrapur are based on a similar fiction. However what is being suggested here is that a similar arrangement, but without the loopholes which can be exploited by contractors, might be generated for a collective use of Ail and Arjun trees. To prevent mis-use by the more alert community this would naturally have to be accompanied by intense education of the rearers in their rights, apart from education in collective ownership and management.

The fisher cooperatives could be used as an illustration both of the possibilities and dangers involved. But there is no doubt that organised association of these forest users could prevent harassment by forest officials as well as competitors for the same forest.

Cooperation, whether formal or informal; control over forest land, whether old Ain forest or new Arjun plantation, must be engineered. According to the present system of extension there would be one extension agent for every 50 rearers and one supervisor for every 500 rearers. Following the same logic 50 rearers namely 50 hectares could be considered to be a base for a local association, whether it is a cooperative or a registered body. The legal arrangements with the forest department, or, as we shall discuss later, with the bank could be negotiated between this group and the development agencies. This would provide some institutional education to the producers, create organised strength as well as help the implementing agency as they would not have to handle several individual units but an organised institution.



## Other Inputs

### Credit

Entry of DCVL has noticeably facilitated the flow of institutional credit to rearers. Bank loans have been extended to as many as 2151 rearers upto June 1981 compared with only 10 rearers in 1976. DCVL helps to get the loan applications filled out with required documentation. It not only sponsors these loan applications for tasar production but also recovers bank instalments while paying the rearers for the cocoons. However, the loan amount per rearer averaged a little less than Rs 300 was confined to tasar; and nearly one half of the borrowers had already become defaulters.

Despite the fact that credit, in this case, is supported closely by a development organisation which provides technical, marketing and field supervisory services, the outlook and the actual credit operations of the Bank do not show any visible improvement in any of the crucial aspects of their loaning practices to the poor for which banks in India are generally criticised. First the quantity of the loan is sub-optimal. It does not fully cover even tasar activity let alone the main activity of the rearers i.e. agricultural operations or their pressing need i.e. consumption between crops. Case studies revealed that loan amounts were as low as Rs 2, Rs 12, Rs 80 in three cases because the bank insisted in recovering the instalment due despite crop failure. Second, disbursement of loans is frequently delayed - instead of being given a month in advance it usually came to the rearers a month after the cocoon purchase season resulting in higher prices. Third, although according to Reserve Bank guidelines loans upto Rs 5000 can be given on personal security, the banks had arbitrarily lowered this ceiling to Rs 500. Fourth, not a single composite loan had been given for equipment, working capital and consumption as envisaged in the Reserve Bank's December 1978 Scheme of Composite Loans to Artisans and Cottage Industry workers upto Rs 25,000 on personal security. Fifth, rearers outside 15 kms from the bank branch were not covered at all.

The conclusion is inescapable that the banks have as yet not invested their lendings to this class of borrowers with any sense of economic rationale or urgency. Nor are they taking the requisite courage to advance adequately to this admittedly risky sector despite the availability of (i) a helping hand of a development organisation in close touch with the borrowers and (ii) clearcut guidelines from the Reserve Bank.

A committed programme of production and income generation for the assetless cannot succeed without the timely availability of credit in the required quantity. Not only the banks, the DCVL too needs to assess and sponsor the composite credit needs of the borrowers for taser and other economic activities. Without this, the growing number of defaulters cannot be arrested. The other side of these defaults is that petty loans (Rs 8, Rs 12, Rs 30) are pushing the rearers in to the arms of the money-lenders whose loans understandably are being repaid first and more religiously because the money-lenders' credit is high cost - interest rates being upwards of 25 per cent.

#### Technical services

While the rearers generally appreciate the help being given by DCVL in the matter of credit, they are not satisfied with the disease free layings (dfls) supplied by the project. They are also not altogether happy with the new varieties of seed (Daba and Sukinda). The handicap of the DCVL extension staff is that none of the modern infrastructure of technical services envisaged in the project has come up on the ground as yet except for the nurseries. For example, the cold storage plant which would facilitate wider use of the traditional mulki seed which the rearers prefer, has not yet been set up. It has therefore been supplying the new varieties of seed from Bihar. Similarly, the project has yet to set up the proposed (i) pilot project centre for the preparation of disease free basic seed; (ii) a scientific grainage; (iii) a warehouse with

modern cocoon dryers for hot air drying of cocoons with testing facilities; and (iv) a training-cum-production centre for improved reeling. It is currently relying on the old and ill-equipped infrastructure inherited from the Maharashtra Khadi & Village Industries Board. Until these basic modernised services are set up the satisfaction of the rearers and that of the project staff itself cannot be enhanced. One of the reasons for the delay is that several of these facilities have been scheduled for phase II which is an error that needs immediate rectification.

### Extension and Training

Extension and training are the other vital elements in the project's package of technical services. Extension staff consisting of 10 demonstrators (one each for 50 rearers and 50 hectares), one supervisor with a jeep (with trailer and a driver), as envisaged, have been provided for the "door to door" identification and follow up guidance of the rearers.

But there are no physical fixed sub-centres for extension in the area covered by a demonstrator in the absence of which the availability of the demonstrator is difficult to ensure. The rearers' access to extension guidance is thus not as easy and certain as it should be. Many rearers would in fact like that such sub-centres should also become the procurement centres for cocoons - suggestions which merit adoption.

Another lacuna that needs to be removed relates to the training content of project which is presently confined to the functionaries. There is no plan or provision in the project for training the participants formally at a camp or a centre - within the project area or in any other State - as has been provided in the World Bank aided mulberry development project in Karnataka (one month training for farmers/rearers in a network of centres).

The dependence on agriculture and fish  
and its relevance to the tasar development  
programmes

As mentioned earlier, tasar is only one of the major occupations of Dhimars. It is partly because of this that the expected returns from investment whether it is bank loan for seed cocoons or arrangements for purchase are vulnerable, unless the project also considers the needs of, for example, the Dhimars as cultivators and fisher folk.

Tasar is a means of survival in the lean months. The loan they get from the bank tides them through those months, and is then repayed from the income from rearing. Very often, due to poor production, they are not able to repay and become indebted. Food production-cultivation period does not clash with the rearing period. If cultivation is being carried out then out of the family, one or two members take care of agriculture, while the rest attend to tasar rearing. While they are attached to tasar, there is also a perspective that the income from tasar, as they put it, is for the daughters' marriage. It is precarious and whimsical.

As farmers they are at the moment subsistence farmers growing rice on rain fed irrigation. There is no focussed effort to bring them under any of the innumerable IRDP programmes as priority beneficiaries. Similarly there is no special effort made to improve their income from fish through intervention in their marketing mechanisms. The earlier tradition of farm based plans where individual cultivators were assisted to prepare their own plans for crop cultivation as well as participation in subsidiary activities such as in this case fishing and cocoon rearing by the local block officers, would ensure that rather than have leakage of credit and other services from the tasar programme into agriculture, each could strengthen the other and ultimately the beneficiary households.

It would also be from the longer perspective point of view quite wrong to make them entirely dependent on a commercial crop like tasar cocoon rearing. The written up experiences of various development programmes

especially the notable report on Poverty and Inequality prepared for the United Nations by the Centre for Development Studies, Trivandrum reveals the importance of not shifting those who are depending on self-cultivation of food crops to become entirely market based producers.

For low resource households, dependence on exchange of their product for food, not only given the poor distribution system but also given the instability in the market for commercial crops has grave consequences on the survival if not the quality of life of vulnerable groups like the Dhimars.

The Dhimars also emphasised this as their own priority at every meeting and repeatedly mentioned how their cultivation activities which were basic to their survival was not getting the attention of the authorities.

Another important finding which should be borne in mind in trying to intensify the advantage of only one of the 3 or 4 life giving activities for say the tribals, in this case the Dhimars, - is the change in the ambitions of the younger generations. Traditionally, cocoon rearing and marketing has been perceived as a highly risky activity by the rearers. Since the silk worm was nurtured on far flung uncontrollable jungles and subject to every kind of calamity it was an insecure but culturally satisfying occupation. For the younger generation especially those amongst the children of the Dhimars who are educated it has no particular charm but a lot of hard work and high risk. They prefer salaried jobs. Hence shifting their interest to tasar by providing incentives only to tasar could also be short sighted policy even from the investment point of view, apart from the production point of view for the programme designers.

While risk minimisation is attempted, both by the plantation base for growing cocoons, as well as by the DFLs, credit and support price and monopoly buying strategy, there are still many risks involved in all the steps.

The first risk is that the majority of the cocoon rearing is still to be done on forest department land which is full of instability in terms of user's rights.

Another risk is the buying. Rearers have complained that in one year they were paid good prices by the DCVL; the next year when production went up the purchase prices for them were brought down due to over supply.

Though the project intends to keep a fairly strong market support posture through warehousing facilities etc. there cannot be any guarantee that prices can be stabilised permanently in the future. There are so many ways in which they can be destabilised by national policy including import changes as happened to the Orissa Tassar Industry due to the import of Chinese yarn.

#### Women

It will be noticed that tassar cocoon rearing is not as important an economic activity for women as it is for men; and that for women agriculture and cultivation provide greater opportunity. The social anthropological reasons for this have been discussed.

Further it has been noticed that if the Arjun plantations are at a greater distance from a homestead than the AIn plantations they would inhibit even the current participation of women in some of the rearing tasks, as obviously women and children would find it more difficult to cover long distances or live away from home than men.

It is, therefore, necessary to examine the implications of these findings. They seem to suggest that strengthening of the agricultural base of the rearers household is even more vital from the women's point of view and becomes doubly so given that they may have to withdraw from the roles they are playing in tassar rearing. Women have been recognised as being the providers of critical survival inputs such as food and care. The earlier point that the Dhimars should not be made completely tassar dependent becomes serious when seen from the women's point of view. The DCVL has so far developed no programme for the women.

Given all this, it is important to ensure that tasar continues to be an additional income earning activity of the Dhimals besides the food and income through cultivation, and this must be safeguarded by the project. Hence it is strongly underlined that tasar should not be made the sole life-line for the Dhimals. It should be maintained as an income augmenting activity and the same implementing agency should ensure that participation in the tasar programme does not pre-empt the Dhimals from consolidating their self-cultivation of food crops.

For this there must be close implementation coordination between the DCVL and the District Development Programme. It was found that the extension agents of the tasar programme did not know about the other agencies programmes within the same area. Similarly the district development agencies did not make any special efforts to incorporate the beneficiaries of the tasar programme in their scope. The banks give for tasar, but not agriculture and so on.

This suggestion of close coordination between a one pronged "(pull up)" programme especially to serve groups like the tribals and the scheduled castes and the remaining needs of the same target population both economic and social, can be proposed as a general suggestion for all such programmes. Otherwise though their basic consistency may be perfect, they could distort the security, the quality of life of these target groups, unintentionally.

#### Institutional Frame work

As said earlier on the positive side, the project is appropriate both to the region as well as the culture, the traditional skills, interests of the participants in tasar rearing. The project has been designed with a deep knowledge of the entire infrastructure needs of a silk production-cum-tribal development-cum-area development programme. However it is in cementing these very links that the project has to incorporate some more institutional measures.

The most important institutional requirement is the creation of some form of association of the rearers themselves. The cooperative comes to mind not only because it was once tried by the Maharashtra State Khadi & Village Industries Board but also because, as a form of organisation, it is functioning in Orissa and, according to all reports, successfully.

However it is well recognised that the success of the cooperative structure depends on many important tangible and intangible necessary conditions, and a fairly slow, careful process of formation.

Inputs such as education of members, management skills, homogeneity of members both in terms of caste and class and occupation are only one set of the conditions. Strong support from relevant departments and institutions such as credit suppliers, raw material suppliers and market outlets provide the lifeline to cooperative survival.

The Anand pattern of cooperativisation of milk production is a well recognised example of strong input and output support to primary producers co-operatives by technological and management cadres; apart from the very strong demand for the milk and its product.

Tasar cocoon rearing may not lend itself to such a capital intensive and elaborate structure as it is not such a primary product like milk or cereal or oil in terms of consumption demand; nor is it so even as it is spread out in the area.

On the other hand the idea of providing support, if a group of people agree to associate has often been used as an incentive to cooperativise; as in the case of fish - here too without the necessary development of awareness in the cooperators, namely the producers, exploitation such as those by contractors and traders is highly likely - if only this criterion is used.



Earlier before the DCVL intervened to facilitate bank credit and purchase the cocoons, Dhimals in groups of 10-12 negotiated the sale of their cocoons with private traders. The DCVL, however, recognises them as individuals and not in groups. They argue that group bargaining was required as the private trader would manipulate the rearers in order to fix the lowest price. On the other hand, DCVL has a fixed purchase price which also tries to provide market support to the Dhimals and therefore collective bargaining is not necessary. While this point is well taken for reasons mentioned earlier, associating or grouping the rearers into organisations has many advantages including feed back on appropriate pricing policies. The earlier basis of grouping which the rearers used whether it was extended akin or locality specific or jungle area use specific could be revised if it is the more natural a formation.

In the context, given the options, the following steps could be taken and decisions on the exact form of organisation could be arrived at the end of the process:

a Consultations between the beneficiaries and the implementing agencies should be held to facilitate a continuous dissemination of information about the short-term and long-term programmes that are being developed by the various departments, in this case the DCVL.

b The idea of introducing a decentralised extension system, under the ISTR, by having sub-centres comprising of 50 rearers and a demonstrator, would ensure a better information exchange system. With the sub-centre as the basic functional unit, the following activities could be introduced through it.

i Rearers conferences could be held at the commencement of the rearing season at each of the sub-centres, such that all the producers are reached. These conferences or 'shabirs' could be used as a forum to disseminate information on how to avail of the credit facility, the introduction of new rearing techniques, about the new inputs, like the DFLs, disease control and to discuss the various methods of reducing or removing the problems encountered by the rearers.

A similar conference could be held at the end of each rearing season, perhaps just before or after the procurement period, depending on everybody's convenience. These sub-centres could also serve as procurement centres.

ii In addition to the rearers conferences which would deal primarily with issues directly related to the rearing, the sub-centres could further service smaller groups of rearers through village meetings. Depending on the proximity of the villages which the rearers belong, two such village

groups could be formed amongst which functional literacy and non-formal adult education classes could be started. This input is essential in the light of the very low literacy level amongst the rearers. Training in leadership should also be provided to build up a motivated cadre of primary producers, who could, at a stage take over the formation and management of producers associations/cooperatives. In addition, selected educated youngmen or women for the target population could be sent to Orissa as "management trainees" in comparative management of tasar activities.

- iii Local theatre, evidence of which was observed during the field visits, could be used as another method of communication. This method would bring in the participatory element, wherein rearers themselves seek and they suggest possible solutions to the existing problems, alongwith an active input from the ISFP demonstrator at the sub-centre. These activities would, however, have to be limited to before and after the peak rearing season. Other forms of communications and mass media could be used all through. There would be the use of audio-visuals and posters, for example wall posters as well as printed literature, the latter being restricted to a very simple and small extent, keeping in mind the level of literacy.

For the purpose of implementation of these activities, under the head of extension system, an increased percentage of the project outlay will have to be put aside for providing this kind of participation.

Who is to do this ? It is true that the DCVL as an implementing agency would have the strongest commitment to strengthen the rearers' knowledge and motivation. It is also true that given the range of knowledge that they require - from legal rights to forest land, to payment rates, through silk-worm rearing and credit facilities, it might be considered whether there are local non-official agencies, whether they are registered voluntary agencies, academic institutions or technical training institutes

participatory element.

During our survey, we were able to identify some agencies, like the Gram Vikas Sava Mandal and the Jan Sangharsh Vahini who are operating different programmes in the area. It can be considered whether a meeting could be called of these agencies and others and a modality worked out by which they could start a process of mobilisation of the rearers.

Other agencies like the Self-Employed Women's Association in Ahmedabad which has organised small home-based producers into associations for availing of credit and markets, training institutions like MDTT, Mobile Orientation and Training Team, Indian Social Institute in Nagpur could be involved. However, the project itself would have to put aside some funds for the building up of target population based institutions.

Alongwith involving non-official agencies, the existing institutions of the rearers should be revitalized. The Dhimar societies which serve the social and economic needs of the Dhimar community, is a ready base for developing the strength of these non-official organ by facilitating their meetings.

The most crucial step however is to create overall conditions which are conducive to participatory development in the tasar sector in Maharashtra and reorienting in that light, the role of DCVL.

22/8/72

### Institutional Framework - AGRI-BAN

While ICM - the implementing agency for ISIP in Maharashtra is operating efficiently, tasar development is only one of its many diversified industrial activities. Being a 'Corporation' it is also under pressure constantly to perform commercially even where there is a recognised development function. Furthermore, the tasar development project is different from its industrial units-factories which are located in our place. Tasar rearers are spread over more than 200 centres and number over 3500. As the tasar project expands, the number of centres and rearers will further increase. Unless they are institutionally linked with ICM in some ways, the management will become a great burden over time.

Increasingly, the ability of the ICM to respond to the needs/demands/pressures of the tasar producers will be hampered by several foreseeable factors : (i) constant need to maintain uniformity between different kinds of industrial enterprises in the ICM-fold, (ii) primacy of commercial considerations over development functions, (iii) centralised decisions at ICM Board level, while the tasar operations are widely dispersed and (iv) even where ICM Board wants to take prompt and appropriate decisions it has to depend on remote control by the State Government headquarters at Bombay.

Presently, there is no crisis of any kind. And therefore the situation is quite congenial to evolve well-considered, long-term institutional arrangements for tasar development in Maharashtra.

By its very nature, sericulture (including tasar) development and expansion is a recognised extension-intensive activity. There is a distinct development

function which the state is required to perform in relation to this industry over a long period. Karnataka with its long history and one of the oldest extension organisation is a case in point. Karnataka is further strengthening and expending its technical extension organisation, network of training, testing, research and development facilities (quite apart from credit, production and marketing support to the industry). In fact, in almost all sericulture States these development functions are embodied in a Directorate of Sericulture - an institution which is missing in Maharashtra.

Time has come for a decision - as Maharashtra is expanding sericulture industry - whether it should not separate the development functions and set up a Directorate of Sericulture which would perform all the extension, training, R&D functions. Over the long-term, it is difficult to conceive these functions being imposed on a corporation like the DCW without harm to both the development functions as well as the DCW.

Simultaneously, the commercial functions of production and marketing should be incorporated in an institutional form or forms which is producer-controlled; and not government-controlled as is inevitable in the DCW set-up. The precise form (cooperative or any other) can be concluded only through extensive discussions with the producers. What is suggested here is the necessity of moving in that direction through well-considered steps over a reasonable period. The earlier experience of failure of cooperatives of rearsers in Chandrapur/Bhamburda can be imbibed into any new initiative; as also that of successes obtained in States like Orissa.

22-8-52

The form in which the development organisation (the Directorate of Sericulture) and the commercial network (primary/apex cooperatives) will reinforce each other, cooperate and coordinate their efforts can be determined once the above steps are decided upon.

At the level of primary cooperatives of producers one of the options is to relate their size to the pattern of the extension organisation under the ISTF i.e. one demonstrator for an area of 30 hectares 30 rearers. Earlier, this study has recommended the setting up of an extension sub-centre at each demonstrator's level; and also to locate there a procurement centre. The primary society could be conceived of as consisting of 50 rearers. The apexing of primary cooperatives could be either in terms of a given area such as a block or a district depending on their number; and/or on a functional basis such as rearers, reelers and weavers. At the state level as development proceeds ahead, there could be a state level federation of the district or functional apex societies.

#### Short-run steps

In the interim, ISTF could advise the State Government

- a) to suggest to ICM to immediately form a separate subsidiary with autonomous powers for management of tasar programme;
- b) to give representation on the Board of the subsidiary to rearers/reelers/weavers; as also one or two technical experts from within the state or other parts of India;

- 108 -
- c) to send a study team of rearers/reelers/weavers to States like Orissa where a cooperative structure has been evolved - so that the producers in Chandrapur/Bhandara can make their own assessment; and
  - d) to send selected educated youngmen and young women from the producers families in Chandrapur/Bhandara to states like Orissa as "management trainees" in tassar cooperative management and to the Vaikantbhshi Cooperative Management Institute at Pune for training in General Management of Cooperative Institutions.

As the longterm steps suggested above get implemented the ICM subsidiary could become an apex cooperative body.

#### Monitoring and Realization

##### Production

Some of the suggestions that emerge for effective monitoring of the project are closely linked with the suggestions we have made in terms of institutional arrangements for delivery of the project to the target group; alongwith coordinated delivery of other development needs of the same target group.

Obviously for increases in production the indicators are fairly obvious - volume of cocoons traded both overall as well as specifically by those who are beneficiaries of the Arjun plantation. For this a baseline survey may have to be conducted to estimate the approximate cocoon production of the 500 selected families who are to use the Arjun plantation almost immediately or in the season 1982-83. The change in this production over the years 1983-84 onwards would indicate the value of the new form of cocoon rearing.



Whether household income, as a result increases from Rs. 400 to Rs.2000 per season would naturally depend both on the value of coccons as well as the price. Hence obviously price would have to be kept constant to monitor change in household income.

A similar tab on a sample of non-Arjun plantation beneficiaries could be treated as control population. Changes in the output of the non-Arjun rearers would indicate the value of the extension programme for seed improvement varying practices and market pick-up as distinct from Arjun.

### Quality of life

If we postulate that the critical inputs noticed amongst the Dhimals apart from coccon rearing are feed grown on own land, fish for additional income and fuel wood from forest based coccon rearing then monitoring should include assessing change in these three elements.

A baseline survey may be conducted which assesses the farm output of the sample of Dhimal's household, the fish outputs as well as the fuel inputs and their sources. Again using this sample of Arjun Dhimals and non-Arjun Dhimals change in these indices could be measured.

### Credit and Extension

Obviously while measuring these quantum and changes in them it would also be important to look at the flow of credit as well as the vigourness of the extension programme. Flow of credit can be assessed through the bank; vigourness of extension programme by looking at the number of rearers adapted to DFLs, using the extension centres etc.

### Institutions

If some of the beneficiaries institutions which have been suggested are formed then there would be the numbers of membership, frequency of meetings, decisions evolved and their effectiveness to be recorded.

While many of these indices can be measured by the implementing agencies' own efforts as an internal checking process, as is done often by the official Bureau of Economics and Statistics in State Governments; it would also be useful to have baseline surveys and 3 year monitoring, done by independent institutions.

However while this may be one process of monitoring the project, the more vigorous and useful process would be through continuous dialogue between the target groups and the project implementors. It is this process of annual conference of rearsers demonstrations, exhibitions, workshops and "shivirs" after every season or before, that would strengthen both the implementors and the receivers. These would serve basically as means of communication and help the project to self-monitor itself without much more formal structures.

It is important that the project sets aside a percentage of the total expenditure - perhaps SDC adds this as an additional grant for building in the participatory process - through use of audio-visuals, theatre, shivirs and conference - both to disseminate the project and knowledge as well as to monitor it.

deaths

a

**Replication**  
**- qualifications:**

The study, if anything, has revealed the importance of specificity, sensitivity to highly local characteristics, rather than generalisation. For example the fact that the beneficiaries of the project in Chandrapur are not the real tribals i.e. isolated anthropologically definable groups living deep in jungles with strong identifiable separating characteristics, deeply ingrained ritual and custom - has shifted the focus of the policy recommendations. There are such tribals in Chandrapur in the interior but their involvement in tasar rearing is very marginal, and

Further the rearers who are tribals i.e. goods, belong to more interior regions are in Sironcha in which, alas, the forest area is likely to be sub-merged due to a new irrigation project. What will happen to the people who are rearing cocoons in the area which will soon be sub-merged? Perhaps Arjun plantations are an even more serious need for these poor victims of development.

The fact that the Dhimars i.e. cocoon rearers of Garchiroli and Bramapuri had multi-occupations and hence different from tribals who have no other means of income earning - especially cash income with which they can purchase needed goods and services, also is significant.

Hence the design and delivery arrangements of the project in these two Tehsils derive from these characteristics as noted by the study; casting doubt on whether they can be generalised for other ISTP project areas.

There may be different levels of poverty (the Dhimars surveyed were clustering as landless or small and marginal farmers) there may be other types of employment opportunities or none at all; there may be more or less of non-official agencies or literacy and so on.

Further arrangements like the DCWL which is an area development corporation handling a wide variety of development activities in the range of small scale industries may not be the implementation agency in other States. Hence what we recommend as arrangements to be made for DCWL may be inapplicable to other project sites.

On the other hand certain broad pointers do emerge which can be classified as aspects of forest use; aspects of commercialisation of tribal life; aspects of participatory development as a safeguard against distortion of objectives; and finally the use of independent surveys to provide feedback to project implementation both at the site level and the national level.

## Some realisable aspects

### 1 Forest use

Forest conservation is obviously too broad a word and conceals within it complex elements of forest use. It is now well-recognized that the biggest inroads in the forest use are made by large scale manufacturers whether of paper, rayon, or traders of wood whether for fuel or building. Many populations that live alongside forests however have for centuries depended on the forests for leaves and gums, for small bits of wood. They have recycled their own forests as in the North-East with a carefully balanced system which preserves them from destruction. Frequently in casting tight bounds over forest use those who are to suffer are the gentle users of forests as they are least organised, least articulate and least economically powerful.

Further while there may be those who use forest for growing things like the silk cocoons there are those who also use the forest for earning income through sale of firewood but in small lots, what are called the wood-cutters.

As forests recede and population pressures increase, the fire-wood-cutters become also a menace on the forest though not as devastating as the timber or paper merchants.

However there has to be certain distinction between the communities which use the forest for growing things and those who chop it for selling wood leading to its destruction.

It seems important that management of forests, arrangements for its use alongwith its survival have to be worked out in much more sophisticated details to local requirements and traditions with rules and procedures evolved to study the local needs. It may also be important to plant forests for specific uses if we wish to preserve the old forests for their ecology, their animals or their plants.

This might require that every project which is designed for tribals or which is designed around a forest area or to train the forest functionaries by exposing to these various issues and helping them to have the necessary judgement in tackling specific demands. No more can forest management be treated as a blanket issue with total bans or auctions or only licensed fellings etc.

So too forest users have to be organised, taught how to make the best of these resources, given alternative options. It appears as if the ISTP should spend as much time, energy and money on mobilising opinion among foresters as it does on providing the technical services and infrastructure for the production of tasar silk from the cocoon stage.

#### 11 Tribal life

The most important replicable element or generalisation that emerges from the study in relation to tribals is that in commercialising their activity, careful study should be made to ensure that they are not made dependent on a commercial activity alone for subsistence. Tribals are usually engaged in some form of self-reliant activities, living close to nature and renewing their own natural resources by careful traditional management combined with ritual. In introducing, as we have called it a single pronged "pull-up" development programme to provide tangible money income to them, it is important to see that the related occupations and sources of survival are not dislodged.

It is also important to see not only that their product is marketed but what they get in exchange for the cash are goods and services which support their cultural and educational development. Often cash

income-flows to tribals are accompanied by the mushrooming of shops which sell liquor and other cheap useless goods thus robbing the tribal of his earning. This has been noticed in those areas of Bihar where mining has employed tribals that their enormous increase in incomes has not been associated with an increase in education or health, nutrition or housing but become a source of income to city trade.

Therefore, wherever cocoons are marketed there should also be community centres where not only food and other basic consumption items are available at fair prices but also services like health, education, exposure to basic knowledge, counselling is available on which their money could be spent.

Arrangements must also be made for having savings programmes in which housing and land development plans are discussed with the tribals and they are induced to start putting away their money towards tangible assets which they are able to understand such as a house or a well or a recreation centre. The same banks which canvass loans and canvass savings but against a physical asset for example a sewing machine or a bicycle.

Much more use could be made of tribal societies as they are traditional formations which have been used by the tribals for decision making, for problem solving, for sharing of information. By using these traditional societies as the institutional nucleus a much stronger base will be available for delivering development programmes. Group activity can be encouraged by making the group the base of land ownership or bank credit or insurance.

Cultural strength can be encouraged by using communication forms which are indigenous to the different tribal communities whether to communicate new agricultural practices including cocoon rearing in this case, or the availability of development benefits or the importance of collective organisations.

### Aspects of participatory development

In the early days of Indian administration from the Durbar there was the conference, constantly used as a means of mobilisation. This has lost its importance in the recent decades as much because administrators are over-burdened with programmes and cannot afford to spend large chunks of time conferring with large groups of people.

Yet, Indian development experience and some of the distortions however unintentional in the distribution of the development benefits has begun to reveal that where there is no participation of the beneficiaries or the people in the decision-making of a programme, there is no development.

The programme can either be mis-interpreted or misunderstood or mis-used.

Hence some form of village level or group level consultations have also to be included alongwith the individual communicator or extension agents supply of information and picking up of feedback. An assembly which discusses a programme has quite a different impact than individual households being linked to community worker.

Apart from conference, there are so many other vehicles of communication today, audio-visuals and theatre, community gatherings and memoranda.

From the point of view of programme delivery arrangements of this kind leading to local institutions composed of the beneficiary groups are not only a safeguard for the group but definitely safeguard the interests of the project itself.

It is now being accepted even in Government of India that it might be important to reserve a percentage of finance for what is called dissemination of information. Dissemination of information is as important even to the functionaries of a programme as it is to the beneficiaries of a programme. The fact that the extension agents of the tasar project did not have any knowledge of the services benefits available through the innumerable other development agencies working in the same area is itself proof of this lack of

communication. It is important that literature on development programmes in an area whichever the nodal department should be available as general information to all the functionaries working in that area whatever may be their specific departmental adjustment. Each facilitator should be as much a facilitator for the other programs in terms of his knowledge.

Similarly, literature and means of making this literature audible and visible to those who cannot read and write should be widely available and distributed in programs areas preceding in plan development project. Arrangements must be made to discuss the project before its finalisation of its design as well as during the course of its information with these groups.

Most project authorities neither have the finance for this nor the skills. It would be necessary to design a scheme by which a development project agency

- a should have resources to spend on dissemination namely printing of literature, broadcasting of information through microphone, theatre;
- b the authority to hire i.e. take the help of specialist agencies in this field whether it is the Institute of Mass Communication, various national institutions for non-formal education, functional literacy communication, to design the modules by which they can develop a participatory process. It is now universally recognised that there are special techniques to build village level participation and if village leaders or development facilitators are exposed to this training they find it much easier to solicit the support of the programme beneficiaries.

A Project Officer should have the freedom to use such specialist skills as much as he has to use the technological and scientific expertise for a production project like tassar. The transfer



of the scientific knowledge to the beneficiary cannot be achieved without the participatory involvement and hence the attitude that expanding of such awareness building or institution building is non-development has to be modified. It is as much a part of development as much an investment in the production programme as it is an investment in the ~~production programme as it is an investment~~ in the development of the human capital.

The last generalisation that could be made is the use of household survey as well as group meetings as a tool of information giving and information gathering. Much more use should be made of survey by government to check the progress of its programmes than visits by functionaries which is the usual procedure. Supervisors and Inspectors get their information by and large from ground level functionaries. Survey of beneficiaries gives the other side of the picture. Hence survey should be not only the kind of quantification that is required for monitoring process indices like output income but also in sensing the felt needs and the multiple dimensions of beneficiaries' groups especially amongst low resource households or scheduled castes and scheduled tribes.

2.8. Some General Suggestions for ISIP

The study of the working of ISIP in Chandrapur has thrown up some suggestions which may be of help in enhancing the efficiency and impact of the Inter-State Tassar Project.

Clear Understanding with forest Authorities

Unlike mulberry, tassarr cultivation is entwined with forests. A clear understanding between Forest Authorities (whose controls have become stricter for environmental reasons in recent years) and the Central Silk Board/ISIP is a pre-requisite of speedy and smooth tassarr development.

ISIP has done well to persuade the State Governments to set up High-power Coordination Committees to mobilise the support of different government departments concerned to hand over needed decisions for the ISIP within the State.

As ICW's experience shows, the issues occupying major time and attention at these meetings relate to an appreciation of the project requirements by the State Forest Departments.

Part of the forest difficulties can be minimised by a clear directive/guidelines from the IG of Forests at the Centre. The Central IG of Forests could convene a conference of State Forest Authorities together with ISIP, to arrive at not only the central guidelines but model State-level guidelines by the State Forest Departments also.

Presently, the High Power Committee in Maharashtra is confined to Forest land needed by 500 rearers under ISIP for plantation work. But the problem of traditional forest use by the other 300 rearers is beset with even more serious problems. It is necessary therefore to widen the scope of these High Power Committees to include all major issues relating to the use of forests for tassarr cultivation in addition to ISIP needs.

Correspondingly, the proposed guidelines to be issued by the Central IG of Forests should cover all aspects of forest use for tassar and not confined to ISTP only. Even as forest area, now needed for ISTP plantation is proposed to be entrusted on long-term lease to ICW etc., traditional forest area used for kosa cultivation should also be secured on long-term lease to save the rearers from day to day harassment. The proposed guidelines should consider placing the forest area used for tassar cultivation directly with the rearers as far as possible. While, for example, in Maharashtra such a lease could be in favour of ICW, to start with, ultimately ICW is a transitory institution. In the long run, the lease should therefore be drawn in favour of the producers' cooperatives. The availability of such a lease facility would help to concretise cooperation among the producers. The cooperative management body could, of course, provide for representation of Sericulture and Forest Departments to ensure proper use of land and observance of lease terms.

## 2. Need for Integration with Other Development Programmes

Though ISTP is an area-based and household-based programme, no mechanism appears to have been evolved as yet, as shown by the examples of Chandrapur/Bhandara, for liaison with other area-based/household-based programmes like IRP, TRYSEM, NMSB etc. These development programmes could also provide reinforcements to the ISTP in terms of support for agricultural and allied activities of the tassar cultivating households since the latter activity is as yet only a secondary or tertiary source of income. At the vital level of good health and welfare of the rearers/reelers, who are among the poorest, liaison with minimum needs programme, e.g. rural drinking water, sanitation, social welfare schemes could be systematically drawn upon for raising the quality of life.

It was noticed in Chandrapur, for instance, that the precise project details and operational/guidelines for programmes, like TRYSEM, IRP etc. are not in the possession of the ISTP tassar development extension staff. Nor are there any guidelines for coordinating let alone integrating the implementation of the various programmes including ISTP, at the operational levels.

### 3. Linked Credit Supply

ISIF (ICM.) staff at Chandrapur is taking great pains to get bank credit for the producers by filling forms, completing documents and formalities. As the Bank of India manager put it "they (ISIF staff) are doing half the Bank's job". This is very creditable and worth emulating by other similar agencies elsewhere.

But as the study shows the loans approved by Bank of India ranged per rearer between Rs. 100 to 300 and were confined to tassar rearing activity. Tassar rearing is only a small part of the income of the rearers in Chandrapur. They depend mainly on agriculture and fisheries for their livelihood. Tassar comes third. But for these principal activities of the rearer households the credit needs are neither sponsored by the ISIF staff nor considered by the Bank on its own; and are in effect not met. Result is that the poultry sums given to the rearers can neither be prevented from being used for more pressing economic needs other than tassar cultivation, and nor are they adequate for productive use. Default and over-due are thus bound to be aggravated. The rearers will get a bad name, hence still further credit supply to them will be automatically choked off once they are labelled "defaulters".

The issue was raised, during the study, at a joint meeting with Bank of India and ISIF staff and the Bank of India Branch at Amori requested to provide composite economic loans for agriculture/fishery/sericulture. The Bank Manager, though willing to try, was however still uncertain whether he needed guidelines/directions from above i.e. Bank's regional office.

It highlights another area where ISIF can at the central level get suitable guidelines issued by RBI/ AICD etc., to ensure sound lending to individual

agricultural households - if ISIR's "Rs. 2,500 income objective" is to be securely achieved.

#### 4. Marketing Infrastructure

ISIR budget provides for Rs. 179 lakhs for "marketing and storage facilities". As the Project report rightly foresees, intensive tasar cultivation under ISIR in seven states may initially create a slump and prices may fall below economic levels. It therefore provides for (a) one market complex in each state for procurement/stocking of cocoons - with paper hot air drying facilities, pest-proof storage and testing equipment and (b) share capital contribution - a total of Rs. 60 lakhs - to implementing agencies to enable them to buy and store cocoons.

This is good. But it does not go far enough. Flood product sales network will also need to be expanded to support the programme and avert slump - initial or subsequent. The programme thus needs additional marketing infrastructure for which there is no provision in the Project report. Maharashtra MSIP, for example, needs a permanent outlet in Bombay city. Some initial capital cost and equipment will need to be subsidised.

#### 5. Producers Education/Organisation

In the ISIR budget there is no express provision of an outline for providing programme information to the beneficiaries, or a short verbal presentation (7 days to 10 days) of all participating rearsers in intensive techniques or a minimum one functional literacy of all rearers/reelers/cow-re etc. This gap should be filled. There must be a specific budget head with provision for producers training just as there is one about training of Project officers.

The Project could, for example, provide for assistance for (a) conferences of producers twice a year (b) publication and wide distribution of detailed information about the ISTP in local language, (c) spread of functional literacy among producers and where the response is good to help them form their associations/cooperatives.

#### Linking with Social (Village) Forestry

One of the consequences of substitution of 'Ain' trees for 'Arjun' trees under ISTP will be a reduction in fuelwood supply to rearers. It is necessary, therefore, that in villages covered by ISTP, special efforts are made to implement the Village Fuelwood Plantation Programme included in the Sixth Plan.

#### Compensation Against Crop Failure

Tasar cultivation being outdoor activity, unlike mulberry, faces climatic and parasitic hazards.

The rearers need some compensatory insurance or support from ISTP, which deserves consideration.

#### Focus on the Poor

Since ISTP is covering only 500 out of 3,500 rearers i.e. one out of every seven families, it is following a criteria of selection which is focussed on the poor - landless, marginal farmers, traditional rearers. While the criteria is unexceptionable, the process of selection through field staff is purely administrative. There is no involvement of the Dhara societies or the Gram Sabha (Village Council) in indentifying the poor families for inclusion in the project. Based on countrywide experience of wrong selection of beneficiaries through the administrative machinery, the Central Government has laid down guidelines, for example, for the Integrated Rural Development Programme (IRDP) that the selection of families to be benefited must be done through an open process with the approval of the Gram Sabha. It is advisable to adopt the same or a similar

procedure for ISIP to make doubly sure that the intentions of the project to serve the poor are in fact fulfilled.

References

1. Bank of India. (Economic and Statistical Department) Tribal upliftment through bank financing - an evaluation study of sericulture scheme in Singhbhum District, Bihar. October 1980; a report.
2. Bhagwat, S.S. Cost and costing of silk, paper presented at the National Seminar on silk export, New Delhi, February 19 - 20, 1982. (mimeograph).
3. Bhandari, J.S. The tribal situation in India. ICARS, Vol X, serial numbers 1, in The Tribal world and its transformation by Vidyarthi, L.S. (General ed)
4. Bhasin, Kamala and Vimala, K., ed. Readings on poverty, politics and Development. August 1980. Delhi, FAO, 1980.
5. Bhowmik, P.K. Reports on scheduled tribes: an appraisal, in: Tribal Development and its administration, Vidyarthi L.S. (ed)
6. Bhowmik, P.K. Forestry, tribe and forest policy in India, in Vidyarthi, L.S. (ed) Tribal Development and its administration.
7. Census of India, 1971.
8. Chand, Malini and Bezboruah, Rekha. Role of women in Forestry. Paper presented at the seminar on Role of Women in Community Forest, FAO and Ministry of Agriculture, Dehradun, 1980.
9. Crooke, H. The tribes and castes of north-western India. Cosmos Publications. 1974.
10. Deogaonkar, S.G. (ed.) - Problems of Development of Tribal areas (Papers in this book were read at the U.G.C. seminar at Aheri, Chandrapur District) 1980.
  - a) Kulkarni, Sharad. - Tribal Education and Development - The right approach.
  - c) Kumaran, V.C., Development of Tribal areas - Certain interdisciplinary areas
  - a) Atre, S.S. Political consciousness and leadership in Maoist
  - d) Sainis, Suda.S., Tribal Economic development and forest



11. Ganguly, S.N. Tradition, Modernity and Development - A study in contemporary Indian Society. Delhi, Macmillan, 197
12. Harriot, M., Village India - Parameters of Change.
13. Integrated Rural Development Programme (IRDP)  
Chandrapur (Maharashtra) II - Backdrop, 1977.
14. Jain, Devaki, Women's Quest for Power, Sahibabad, Vikas, 1980.
15. Jolly M.S., Sen S.K. and Absan M.M. Tasar Culture. Ambika Publishers, 1974.
16. Maharashtra State Gazetteer. Chandrapur District, Bombay, Directorate of government printing, stationary and publications, Maharashtra State, 1973.
17. Mishra, Narain. Cultural persistence and change; a rural profile of Anjan. New Delhi, Classical Publication, 1973.
18. National workshop on organising self-employed women in India, SEWA, 1981. Report.
19. Ramdarai, B. - Indian silk export in the context of World Silk Trade. (mimeograph).
20. Singh, Bhupinder; Dynamics of development - The participant perspective. ICAES, Vol X, serial No.1 - In Tribal World and its transformation. Vidyarthi, L.K. (General ed.)
21. Swaminathan, M.S. - Stress on strategy analysis for research. Indian Silk Vol XX; No.7; November 1981.

INTER STATE TASAR PROJECT

REPORT ON A FIELD SURVEY

Chandrapur District  
Maharashtra

APPENDICES

INSTITUTE OF SOCIAL STUDIES TRUST

NEW DELHI

## Table of Contents

		<u>Pages</u>
	<u>Appendix I</u>	
1	Methodology of study	1
2	Notes on field study	
	2.1 Responses to questionnaire	11
	2.2 Problems faced in the course of the field survey	14
3	Estimational techniques adopted in processing field data	16

## Appendix II

Background note on relevent population  
Chandrapur district, with special  
reference to Garchiroli and Brahmpuri  
Tehsils (based on secondary data)

1.1	Physical features	19
1.2	Forest Resources	19
1.3	Water resources	19
1.4	Climate	20
1.5	Accessibility	20
1.6	Garchiroli tehsil	21
1.7	Brahmpuri tehsil	21
2.1	Population	23
2.2	Language	24
2.3	Religion	24
2.4	Literacy	25
2.5	Health	25

	<u>Pages</u>	
3.1	Agriculture	25
3.2	Allied agricultural activities	27
3.3	Forest based activities	27
3.4	Fisheries	27
4	Industries	28
5	Credit facilities and cooperative societies	28
6	Social services	29
7	Zilla Parishad Schemes	30
8	Small farmers development agency	31
9	Voluntary organisations	31
10	Dharmas	31
	- Occupation	32
	- Tasar rearing	32
	- Social life	33

Annexures

		<u>Pages</u>
Annexure I	Tasar silk rearing in Chandrapur District	34
Annexure II	Schedule I - Village information	40
Annexure III	Schedule II - Household survey	42
Annexure IV	Some agencies - Indian and others that could be used for facilitating	55
Annexure V	Photographs	
Annexure VI	Map of Chandrapur District	

List of tables

- Table I Land utilisation in Garchiroli and  
Brahmpuri tehsil in Chandrapur  
District (1962-64).
- Table II Area and population, 1971, Chandrapur  
District.

## Appendix I

### Methodology of Study

Phase I      18th Sept '81 to 23rd Nov. '81

1. Collection of data from secondary sources. The first stage of this phase was devoted to the collection of data on Chandrapur District, specifically on Garchirdi and Brahmpuri tehsils and the tasar silk industry in the district and the aforementioned tehsils. Data was also collected on the tribes of the Vidharba region in order to identify the target population of the study.
2. Review of secondary data. The data collected was discussed in the light of the experiences of Krishna Mahapatra who has worked with tribals of Orissa so as to adopt a clear approach in the forthcoming pilot survey.
3. Pilot survey.      17th Nov '81 to 24th Nov. '81

Objective of this field visit was to gain first-hand information on the target population, target area and tasar silk-worm rearing, and to corroborate it with data collected from secondary sources. This visit was undertaken independently, without the assistance of either the ISTP or the DCVL.

Wardha: Relying on contacts built up in course of past ISST field studies, the ISST team of three women contacted Ms Padmaja Bang of Chetna Vikas, Gopuri and Mr. Kanakmal Gandhi, Sewa Gram, Wardha. Having procured a list of possible contact persons working in the target area from them, the team proceeded to the Maharogi Sewa Samiti at Warora.

Amardwan, Warora: Baba Ante and Vikas Ante were reluctant to help in this venture. Baba Ante explained that a few months back a government agency, presumably the DCVL, had suggested to them that they start an experimental tasar silkworm rearing project at the Ashram itself. But after the necessary preparations were made, the government agency did not contact Baba Ante again, rendering their efforts and hopes futile.

However, Baba Ante offered the team full hospitality and an escort to Mul.

Mul: At Mul, the team contacted Mohreshwar Badlakondavar, Secretary of the Gram Vikas Sewa Mandal, who agreed to accompany them on a brief appraisal study and then confirm his involvement in the study.

Garchiroli Tehsil:

Operating from Garchiroli village, the following villages/areas were visited:

<u>Location/agency visited</u>	<u>Purpose/outcome of visit</u>
- 2 villages	
Wakdi	- Discussed issues related to the target population and rearing with two madis of the ISTF staff (a Kosti, viz. a former spinner and a Dhimar from a rearing family)
Adapalli	- Called a village meeting with the help of the village gram Sevak of members of the Dhimar community. Discussed the existing patterns in the of economic and socio-cultural systems, with special reference to the tasar silk-worm rearing occupation. Conducted four brief case



- Two rearing sites
  - Wakdi Economic Plantation of Arjun trees - saw the progress of the 150 *hectare* plantation. The Arjun trees (about a foot high then) were being regularly watered by water carriers.
  - Ain tree rearing site - Did brief case studies of three Bhimars from village Ranmulza (later selected for field survey) who were working on forest site on tasar.
- DCVL Tasar centre, Armori - Observed the grainage operations then in progress, talked to the spinners at the centre as well as to Mr. Bijagare, a trainee, about the spinning process ~~at~~ <sup>its</sup> economics. Conducted a late night discussion with the women spinners at the Armori centre. Discussed their problems, their existing pattern of work and payment.
- Bank of India, Armori Branch - Discussed the bank's scheme of providing credit facilities to rearers of tasar silk. Collected the various documents related to this scheme.
- Weekly Bazaar Garchiroli - Saw no signs of any transaction or buying and selling of cocoons as was done in the earlier times.

Data collected during this field survey covered the social life of Dhimars and their occupational patterns. In depth study was done to gauge the pressure points in tasar silk-worm rearing, the rituals and taboos attached to it, the past and current relationships with linked institutions like the DCVL, Forest Department, Bank of India, money lenders and the range of problems faced by the rearers in dealing with these institutions. A basic idea of the situation of tasar silk spinning process was also gained.

Phase II. 24th Nov '81 to 23rd Dec '81

1. Meeting with the Swiss Development Corporations-

In this meeting the data collected to date was reviewed and areas of special interest were identified. An analytical framework was discussed and time schedules were set.

2. Meeting with Chitkala Zutshi, Chief Project Officer, ISTP

In this meeting, the basic constructs of the ISTP were discussed with the Chief Project Officer. Several queries regarding the ISTP were also answered by her. The necessary arrangements for subsequent field visits were made through her with the DCVL at Nagpur.

3. Formulation of the sample design and questionnaire for field survey

~~Questionnaires for canvassing on the target population as well as the sample design were formulated with the assistance of studies on two landless rearers, a young Dhimar tailor educated upto the 8th standard belonging to a rearer family and a woman Dhimar.~~

### 3. Field survey: Sample design and questionnaires

Sample design: At the first stage two tehsils of Chandrapur district, viz. Garchiroli and Brahmpuri were selected, as each is to have the Economic Plantations of Arjun trees under the ISTP. Eight villages were selected, four each in each of the two tehsils. The villages were selected on the basis of dispersal of cocoon rearers. Data on dispersal of rearers in the Dhimar population in each village was obtained from the DCVL's register of rearers 1980. Four of the eight villages have more than 50 per cent of the Dhimar households engaged in rearing in each of the villages as identified by the DCVL. The remaining four villages have less than 50 per cent of the Dhimar household engaged in rearing in each of the sample villages. A list of names of the rearers, along with their land holdings, was obtained. Twenty rearers were interviewed from each of the sample villages with a high rate of participation in tasar rearing and approximately five each from villages with a low rate of participation in tasar rearing. These respondents, who were the male head of the household were interviewed as and when they were available (see appendix I 2.2)

Thus though the sample reflects the general characteristics of the eight sample villages and the rearer community at large. The sample was not a truly representative one.

#### No. of Dhimar rearers household to be surveyed in sample villages

<u>Garchiroli tehsil</u>	<u>Brahmpuri tehsil</u>
Ranmalza - 20	Mendki - 20
Kotgal - 20	Gogaon - 20
Mendatola - 4	Chichgaon - 7
Porla - 6	Baradkinhi - 3

Questionnaire - (See Annexure II,III): Questionnaires

for canvassing on the target population as well as the sample design were formulated with the assistance and guidance of <sup>Dr</sup> Swapna Mukhopadhyaya.

To supplement the data obtained from the questionnaires, general discussions were to be held with relatively homogenous groups (in terms of status, age, economic background) of rearer as well as Dhimar non-rearers. The discussions with the rearers were to obtain general background information on the rearing seasons, crop calendar, division of labour, tasks within rearing etc., to more specific information on their perception of the DCVL and other linked institutions on focused area of interest like credit facilities, production levels, pricing policy etc., and participation levels of the rearers in decision-making processes. The discussions were to cover the existing socio-political aspects of the rearing process and the Dhimars themselves. The format for the discussions was kept flexible so as to allow and encourage the rearers to talk about issues that were of specific interest to them.

The general discussion held with the Dhimar non-rearers focused on the reasons and problems as perceived by them, which deterred them from undertaking rearing. Suggestion as to the incentives, if any, which should be made available were also to be discussed.

4 Field Visit : 17th December to 23rd December 1981

The objective of this field visit was to obtain indepth information from the various institutions linked with the tasar industry in order to corroborate with the data collected from the target population in the previous visit. The field survey was also to be started as per schedule.

Agency/location visited

Purpose/outcome of visit

1 DCVL, Nagpur

Series of indepth discussions were held with Mr. Mulherkar, General Manager, Tasar Project, DCVL.

The range of issues discussed weres

History of tasar rearing in Chandrapur district, with emphasis on the involvement of DCVL in this activity.

Tasar rearing and its various aspects ranging from cropping patterns, varieties (old and new) of tasar, DFL's and other proposed new inputs, tasks and division of labour within rearing, procurement and marketing as well as the proposed policy of monopoly buying, and factors governing price fixation of both commercial and pierced cocoons.

The Forest Department policies, and the problems faced by the rearers as well as the steps taken by the DCVL to alleviate these problems.

Bank of India and the tie-up arrangements with the DCVL in disbursing loans to rearers. Criteria of giving loans and policies regarding recovery, availability of loans for agricultural purposes and the existence of money-lenders.

Problems related to spinners and reelers of tasar silk, with specific reference to work hours, quantum of work, modes of payment, leave, social security and bonus. Also discussed thigh reeling vs. machine reeling and the deduction of weight for water content.

2 Reeling Unit  
Nagbhir

A brief visit was made to the centre where the reeling process was observed. Also discussed problems relating to their working conditions.

3 Economic plan-  
tation of  
Arjun trees,  
Mendhi

Visited the plantation with the DCVL Manager, Mr. Aranke, and observed the work in progress in the three sub-plots of 50 hectare each.

Ain tree  
plantation,  
Mendhi

Also visited a traditional forest rearing site next to the Arjun Plantation. Saw the larvae which had just gone into the cocoon making stage.

4 Armori Tasar  
Centre, Armori

Held indepth discussions with Mr. Bijagare, Senior Field Officer, DCVL/ISCP. Issues raised were:

- A Modes of increasing incomes of the rearers, for example, by introducing spinning and reeling silk cocoons amongst them.

The functions of the earlier rearers cooperatives and their utility in the present circumstances.

- B Selection of sample households

5 Gram Vikas  
Sewa Mandal,  
Mil

Contacted Mohreshwar Wadlakodvar. Briefed him on the questionnaire and method of canvassing it. Discussed the details of the findings to-date on tasar rearing and the target population. Shared the basic format of the general discussions to be held with the rearers and Dhimar non-rearers and gave him the list of selected villages and the names of the rearers for each of the villages.

5. Field survey: The field survey started out the 26th of December 1981 by Mohreshwar Wadlakondawar and team, beginning with Garchiroli tehsil.

Phase III

24th Dec to 15th Feb

- 1 A meeting was held to discuss the initial findings of the field visits with Dr. Swapna Makhopadhyaya, Krishna Mahapatra and the ISST team. Various social and economic aspects were identified and discussed which required specific attention in the field.

- 2 Field visit 13th Jan to 31st Feb '82

Agency/location visited

Purpose/outcome of visit

- 1 DCVL  
Nagpur

Discussions were held with Mr. Muiherkar on the following issues:

The new techniques and their level of implementation, causes for crop failure and disease.

Participation of the rearers in the planning and implementation of the DCVL tasar project and the ISTP

Traditional and local organisations of the Dhimar.

- 2 Bank of  
India,  
Nagpur

Discussions with Mr. A.P. Phudais, Manager, Bank of India. He is conducting a research project on the impact of the Bank loans on sericulture and the rearers. The following aspects were covered:

Present tie-up arrangement with the DCVL for disbursement of loans for rearing, criteria and methods of disbursement and recovery of possible modes of reorganising the procedure.

Need for introducing loans amount statements, pass books and organising village meetings with the rearers for dissemination of information.

- |    |   |  |
|----|---|--|
| 3. | DCVL<br>procure-<br>ment<br>centre,<br>Garchiroli | Visited/observed the process of procurement of cocoons.                            |
| 4  | Reeling<br>centre<br>Nagbir                       | Discussed issues similar to those discussed with the spinners at the Arzori Centre |

3. Field survey: The questionnaire was canvassed in the sample households. Four of the eight sample villages were revisited. General discussions were held with rearers and Dhimar non-rearers of the sample villages. In some cases the sarpanch and gram sevaks of the the villages were also consulted.

The field survey was completed by the 15th of February 1982.

Phase IV                      Mid Feb '82 to Mid March '82

- 1 Processing and tabulation of field data
- 2 The silk export seminar was attended by the ISST staff on the 19th and 20th of Feb 1982

Phase V                      April to 13 May '82

1. Analysis of field data
2. Writing of the report draft
3. Field visit: April 30 to May 2nd

The objective of this visit was to share the findings of the field survey and to discuss the feasibility of the proposed recommendations

4. Preparation of final report.



2 Notes on field survey

2.1 Response to questionnaires

While canvassing the questionnaires, a certain trend emerged in the overall pattern of responses obtained from the respondents. It was found that on certain aspects, the respondents were unable to give complete and coherent information. This could either be because, in some cases, they did not have the relevant information, i.e. their ignorance of that subject, or due to their inability to order their thoughts and information into a coherent response to the questions asked of them. Information which was not forthcoming from individual respondents was later obtained from group discussion with <sup>the</sup> teachers in which an overall impression on specific issues was gathered.

Stage I - questions Nos. 1 to IV

These questions were answered with relative ease. But in the case of incomes obtained from agriculture and the other occupations pursued by the respondent and his family members, responses were not precise. In most cases, the respondent could not recall the exact amounts earned by other members. Some respondents in terms of the income earned in cash, while others could only give amounts in terms of kind. The period for which a particular amount was received, was not uniform in all cases, and some amount of approximation was resorted to by the respondents. The days of employment were also given in approximate days and in some case even in approximate months.

Block II - Questions 5 to 10

On the section in which quantitative data was collected, again the respondents found it difficult to give precise answers. Responses to the questions on credit were, in most cases incomplete. Respondents were able to recall loan amount borrowed in the 3 years specified, from the bank of India, but were unable to answer question on the debit rate. In a large number of cases, they did not know the rate of interest they paid. In this aspect, there was a marked lack of information among the respondents.

A similar pattern also emerged in the case of production figures, wherein the respondent, though able to recall the amount produced in the last season, and to some extent seasons preceding it, were in most cases only able to furnish information on the acres of the last season.

Block III - Qualitative Information

While answering questions which probed their opinions and called for their suggestions, <sup>the</sup> majority of the rearers were unable to order their thoughts and present their views. *Int* tendency was to consult other rearers, in case they were present at that time. The more articulate amongst them, however, were able to answer these questions with a fair degree of confidence and clarity. However, there emerged a confusing picture in the respondents' perceptions of the various institutions associated with rearing. Often, for the respondents, the bank and the bank of India

signified one and the same institution. Great use was made, in particular, of certain questions which were clearly answered, for example, the problems faced by them in marketing, and pricing policy etc. But in the case of L.I.C., a poor response was obtained, mainly because they were unaware of this input. The same trend was noticed in their responses to questions specific to the I.C.I., where they were unaware of the existing policy. In such cases, the policies had to be explained before questions were asked. A marked lack of knowledge was also apparent in the responses to questions on the existing development schemes. The social aspects of rearing were answered with relative ease by the respondents.

#### Block IV

Responses to the questions on time allocation, during the rearing season showed a distinct variation on comparing responses obtained in the middle of the rearing season (January), to those obtained at the end of the rearing season (February). Hours given were approximations, based on recall. The responses, however, tallied in an overall manner <sup>with</sup> the observations of the field investigators.

Expenditure allocation, again was based on approximation. Most respondents giving quantities purchased instead of the amount spent. They found these questions difficult to answer. Responses were given in terms of daily, monthly or yearly consumption, depending on the items asked.

It was noticed that certain aspects which individual farmers were unable to provide answers, were adequately discussed and responded to in the general discussion held with them.

2.2 Problems faced in the course of field survey.

Several problems were encountered <sup>red</sup> during the field survey period. The main problems were as follows.

- Language problem. The ISST field staff, being relatively unfamiliar with ~~the~~ <sup>the</sup> Marathi, had to seek the assistance of the local people. In the case of the general discussions, the problem was not so acute since some among the younger generations of rearers knew Hindi, and they acted as the translators. But in the case of questionnaires, where detailed information on various aspects was required, the ISST staff took the help of Mohreshwar Wadlakumar and his four co-workers. All five were local people, familiar with the dialect, and therefore better equipped to get the required responses.

- A significant aspect that slowed down the pace of the field survey considerably was the fact that towards the end of the rearing season - it became more and more difficult to persuade the rearers to find time enough for answering the questionnaires. Often, the field investigators worked late into the night after the rearers had returned from the forest site. The absence of electricity connections in most villages proved to be an added disadvantage and work was done by the light <sup>of</sup> and kerosene lamps. In other cases, when rearers did not return from the jungle the investigators had to go to the forest rearing site itself in order to fill the questionnaires with the rearers.

- The untimely rains at the end of January, beginning of February, delayed the field investigation further since the already inadequate transport system became ineffective on the unmetalled roads connecting the sample villages.

- The length of the questionnaires, which in its attempt to capture a detailed insight into the various facts of ~~the~~ rearing, the problems and opinions of the rearers tended to become taxing on the respondents time and in some cases, patience, especially during the peak season. Although ~~the~~ <sup>the</sup> rearers and their families were most hospitable, the length of the questionnaire often raised comments from the respondents.

- The information asked of the respondents, on various issues required accuracy and clarity. However, as already mentioned earlier, the ability to classify data and to respond with coherent answers was often lacking on these issues <sup>and</sup> a common characteristic was the incomplete response given. In other case, ignorance of certain policies and schemes proved to be problematic in terms of obtaining precise data.

- In some villages the local panchayat was unwilling to help, sometimes even resenting the presence of the investigators. The rearers themselves, though, opened the doors of their homes willingly to the field investigators with no trace of hostility.

3. Estimational techniques adopted in processing field data.

One major problem in the processing of the field data was the incomplete responses to certain questions. The reasons for this phenomena have already been explained earlier.

Secondly, when it came to income, it was expressed by most respondents as approximate values, and in varying units. As in the case of income from agriculture, the respondents gave the quantity of agricultural yield obtained per year. These were then converted from the traditional unit of measurement, Khandi, to Kilograms. Using approximate value of the current price of each particular commodity in that region, the net income from farming was calculated. These figures are not precise measurements, but are intended to serve as indicators of the general trend, and to be used for the purpose of facilitating comparison. A similar exercise was repeated in the case of expenditure allocation. Items like clothes, which were purchased approximately twice or thrice a year, were converted in each case to their monetary value. For expenditure on food, an estimated value was worked out with the respondents themselves. To facilitate comparability all the values were converted for all commodities to monthly expenditure.

In order to project a decisive picture on the existing patterns of labour time use, of the credit etc, facilities available, on income patterns averages were calculated as to obtain representative figures for the aforementioned aspects.

The section on qualitative information, which dealt primarily with the subjective opinions, feelings and problems as perceived by the respondents, brought in a wide spectrum of responses. These responses were then aggregated under specific headings, ascertaining their salient features in each of the categories. Thus an attempt was made to present a coherent and decisive picture on the <sup>various</sup> aspects covered through the field survey.

## Appendix II

Background Note on Relevant Population,  
Chandrapur District, with special refer-  
ence to Garchiroli and Brahmapuri Tehsils  
(based on Secondary Data).

1 Physical Features

- 1.1 Chandrapur district is the largest district of Maharashtra, situated on the border of Maharashtra - Madhya Pradesh and Andhra Pradesh.

The district covers a vast area of 26,128.59 sq. km. and is divided into 6 tehsils for the purpose of administration and into 18 Development blocks.

1.2 Forest Resources

This district has the highest forest area in the state (56% to 71%) and comes under the top producing zone of the country. It has tremendous potential for timber production, wood and wood-based by-products and forest by-products.

Scientifically, these forests belong to the southern tropical dry deciduous forests. For administrative purposes, it is divided into 6 forest divisions - South Chandrapur, Central Chandrapur, Western Chandrapur, Eastern Chandrapur, Nilapalli and Shamragurh divisions. These are further subdivided into 41 ranges, 102 ranges and 590 beats.

1.3 Water Resources

In terms of water spread area (26,100 hectares), Chandrapur tops in Maharashtra State. Five perennial rivers drain the district - the Wainganga, Wardha, Pravara, Indravati and Godavari. The Wainganga, with its large



number of tributaries, flows from north to south of the district, dividing it into two unequal halves - the western part containing Arora, Brahampuri and Chandrapur tehsils, which are economically more advanced and accessible, and the eastern part comprising of Garhchiroli tehsil and the northern part of Birncha tehsil, which are the comparatively more backward tribal and inaccessible jungle infested areas of the district.

Besides these rivers there are 14 small seasonal rivers and their tributaries, 4 reservoirs and 12,000 tanks.

#### 1.4 Climate

The district is characterised by hot summers from May to March (maximum temperature  $48^{\circ}\text{C}$ ), a well distributed rainfall during the south-west monsoons from June to September and a general dryness, except in the rainy season. The post-monsoon season is followed by the winter (minimum temperature  $11^{\circ}\text{C}$ ) from December to February.

#### 1.5 Accessibility

Infrastructural facilities like roads and communications are too meagre in this area, making it virtually inaccessible for nearly 5 to 6 months of the year (around June to November).

Trunk railway lines pass through the extreme north-west corner of Chandrapur, and the rail communication in this vast district is highly inadequate.

All-weather road communication is lowest here amongst the districts of Maharashtra. Most of the available roads are seasonal in nature with a lack of bridges over rivers and nullahs.

Post, telephone and telegraph communication is also very marginal.

The inadequate transport and communication facilities have proved to be one of the principle bottle-necks in the successful implementation of the various development programmes in this district.

### Tehsils

#### 1.6 Garchiroli Tehsil

Two-thirds of this tehsil is hill country, with isolated hill masses in the eastern region. Dense, wet deciduous mixed forests with high grass characterize this area, and it falls under the Ambala Nagar reserved forest division.

The tehsil is drained by 2 main seasonal rivers - the Khobragadi and Kethani rivers and their tributaries and three streams of Koharnadi, all rising in the eastern hills of Garchiroli tehsil.

This tehsil is accessible mostly through unmetalled roads, cart-tracks and foot-paths.

#### 1.7 Drakpuri Tehsil

It consists of a number of low hill ranges, belonging to the group of ranges called Chisur. The ainganga

flows through this tehsil and then enters Chandrapur tehsil. Brahmपुरi tehsil and eastern Chandrapur is a beautiful lake country with a lot of natural tank depression.

This tehsil, in comparison to Garchiroli is more accessible.

Table 1 : Landutilization in Garchiroli and Brahmपुरi tehsils in Chandrapur District (1962-64).

<u>Tehsil</u>	<u>Year</u>	<u>Total area (sq. km.)</u>	<u>Forest (sq. km.)</u>	<u>Barren land (sq. km.)</u>
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Garchiroli	62-63	722927.023	451669.640	8542.112
	63-64	722927.023	438378.942	8419.087
Brahmपुरi	62-63	260987.262	117423.690	1662.045
	63-64	260987.262	13029.609	1456.870
<u>Land under non-agricul- tural use (sq. km.)</u>		<u>Cultivable waste (sq. km.)</u>		<u>Permanent pastures (sq. km.)</u>
<u>6</u>		<u>7</u>		<u>8</u>
30172.983		30903.4-2		71994.044
30179.263		29761.418		72364.736
21659.199		11391.506		24862.289
21670.935		7086.456		14635.064

Source: Maharashtra State Gazettees-1973

## 2.1 Population

The provisional data available from census 1981 gave the total population of Chandrapur district to be 20,54,286 with 17,92,883 in the rural areas and 2,61,403 persons in the urban areas.

Table II : Area and population, 1971 Chandrapur District

Chandrapur District	Area in sq. km.	Population		
		Persons	Males	Females
District: Total	25641.0	1,640,137	832,567	807,570
Rural	25532.7	1,473,037	743,588	729,449
Urban	108.3	167,100	88,979	78,121
Garchi: Total	7433.3	381,723	191,982	189,741
-roli Tehsil Rural	7406.6	369,940	185,972	183,968
	26.7	11,783	6,010	5,773
Brahm- : Total	2323.2	281,394	141,053	140,341
pur Tehsil Rural	2323.2	281,394	141,053	140,341
Urban	-	-	-	-

Source: (Census Of India '71)

The population of Chandrapur district has the highest proportion of tribals in the State. They constitute 14.82% of the total population of the district. As many as 34 tribes have been declared as Scheduled Tribes in the three tehsils of Gorchiroli, Sironcha and Rajura. No tribe is recognised as a scheduled tribe in the tehsils of Brahm-puri, Chandrapur and Warora. The 1961 census enumerated only 13 of the 34 scheduled tribes in the notified area, such as the Bhils, Binjwar, Gond, Halbar, Kawar, Khairmar, Kolan, Korku, Koya Nagasia, Pardhan, Pandbhi and Jhoti. They

numbered 1,83,431 or 14.82% of the total population. The remaining 21 scheduled tribes for which no one was returned in the notified areas are as ~~follows~~ <sup>follows</sup>: Andh, Barga, Bhaina, Bhabis-bhunia, Bhatta, Bhungia, Birkul, Bhanwar, Gadaba, Kamar, Kharis, Kondh, Kol, Korwa, Mahuar, Mundia, Nihal prason, Parja, Raonta and Saur.

The Gond is superior in terms of numbers and cultural identity, followed by the Parjhans. Nearly 95% of the scheduled tribe workers are cultivators.

Scheduled castes account for 4.69% of the population presently.

Nearly 45 to 60% of the rural poor are below the poverty line (Rs.1) with an annual income much lower. Rural women and children form a major group of the poor in this district.

## 2.2 Language

From the point of view of numerical superiority, Marathi is the principle language and is the mother-tongue of 75.97% of the population. Gond ranks second and is spoken by 11.81% of the population. Telugu ranks third, spoken by 7.63% of the population especially in Sironcha, Chandrapur and Garchiroli tehsils.

## 2.3 Religion

The population by Religion in 1961 had the maximum proportion amongst the Hindus, followed by the Buddhists, Muslims, Sikhs, Christians, Jains, Zoroastrians and others, in this order.

## 2.4 Literacy

The literacy percentage in this district is the lowest in Maharashtra. Due to sub-marginal economic level, the children of the school-going age are subjected to work and help earn a living. Facilities for schooling and/or vocational training are inadequate. Only a little more than a quarter of the population is literate (26.7%) the literacy rate for the state being 39.2% and for India it is 29.5%. 38.6% males and 14.5% females are literate. The literacy in rural areas is as low as 24%.

## 2.5 Health

Due to inadequate health cover <sup>and</sup> hygiene, the incidence of T.B., leprosy and other communicable diseases amongst the rural poor is alarmingly high. Life expectancy is low - around forty years. Rural women and children suffer from malnutrition - the children are underfed and women from high pre and post natal mortality.

## 3 Agriculture

The economy of the district is predominantly dependent on agriculture. Landless labourers constitute 15% of the district's population and are engaged in seasonal occupation like agricultural labour, forest based and allied occupations. Marginal and small farmers constitute 5.15% of the district population, owning less than 20% of the land with poor productivity and primitive farming systems, leading to a limited income and considerable under-employment. Mono-crop good grain farming is done.

In addition fragmented holdings heterogeneous nature of soil, lack of facilities for investment in inputs and irrigation, landscaping and development, improving fertility of the soil are some of the constraints faced by these farmers. The small farmers development Agency (SFDA) has declared small holdings as uneconomical in their plans to dig wells. There are inadequate irrigation facilities, specially during critical phases of crop when the intersepi (dry) duration is long.

The Maharashtra Agricultural Lands (Ceiling on holding) Act 1961, was applied from January 1962. Sarchiroli Tehsil is one of the notified areas. Ceiling areas for dry crop land for every such area has been fixed at 50,990 hectares (126 acres). In cases of irrigated land the ceiling area is 7.254 hectares (18 acres), in case of perennially irrigated areas, 10.920 hectares (27 acres). In areas where irrigated in 2 seasons and 19.426 hectares (48 acres) in areas irrigated in one season only excess land is ultimately vested in the State government which in return makes provisions for payment of compensation to the holders. Such land is then distributed to the landless or other persons in the prescribed order of priority.

Cropping pattern: small farmers grow just enough food grains to see <sup>them</sup> through the year. Surplus, if any, is disposed of in the weekly markets.

Jaddy is grown extensively in southern and northern regions. Jowar and pulses predominate in the central and northern regions. Wheat is also cultivated. The proportion of the crop raising can be roughly categorised as 60% grain raising, 13% pulses and 7-8% sesamum for oil.

At present availability of land for an active worker would remain just under 1 hectare. The land-man ratio being unfavourable, the absorption of the projected increase in the labour force in agricultural occupations is posing a serious problem. According to the existing socio-economic relationship, agriculture alone will not be able to accommodate less than a fifth of the total increase in the labour force.

Various projects meant for boosting agricultural production were launched during the past 4 decades, such as Community Development projects (C.D.P.), Small Farmers Development Agency (S.F.D.A.), Marginal Farmers & Agricultural Labourers (M.F.A.L.) in selected districts. Institutionalisation of credit through co-operatives have also been introduced to get rid of the money-lenders. However, all these steps, to date have achieved far from adequate success <sup>in</sup> ameliorating the economic conditions of the S.F.D.A. groups.

3.2 Allied agricultural activities like dairy, poultry, goat and sheep rearing offer subsidiary occupations. Random grazing is a major <sup>cause of low productivity</sup> ~~activity~~ in goat and sheep rearing.

3.3 Forest based activities

Among the other occupations associated with the forest, tasar silk worm rearing is engaged in by the Mairas, a nomadic tribe, except in Giranoha taluk where the Gond and Mals rear tasar silk worms.

3.4 Fisheries

The number of people in the fishery occupation is meagre, inspite of the high water spread surface area, combined with the potential for high fish production.



There are about 10,000 active fishermen in the district. At present, fishermen are buying fry for stocking certain tanks from the Department of Fisheries. In most tanks and rivers, however, breeding is not done on an organised basis and there is a decided lack of coherently organised cooperative societies of fishermen. Fishermen's cooperatives, according to the L.D in Chandrapur district (1973), are functioning in 5 blocks which are Gondpipori, Kurkheda, Chamorshi, Arnori and Najura. Brahmpuri has 3 fisheries with a membership of 504 and has access to 7 State tanks. In Garchiroli tehsil, there are 6 fisheries with a membership of societies - 727 and a total of 11 State and Zilla sanctioned tanks.

As fishing rights are given only to cooperatives, membership of such cooperative societies is likely to increase considerably. The lead bank (Bank of India) is also providing assistance to fishermen for purchase of nets.

#### 4 Industries

Besides agriculture, Chandrapur district is very rich in natural resources which comprises of mineral deposits, coal deposits, forests and live stock. These vast resources have remained largely unutilised. There are only four large-scale industries - paper, glass, pottery and oil. The general pattern of non-agricultural employment however, leans heavily towards small-scale and household industries (i.e. 79%).

#### 5 Credit facilities and Cooperative Societies

Though Chandrapur tehsil has the highest number of money-lenders in the district, it is possible that

in the entire district itself, which is economically backward, there might be a number of money-lenders still carrying on business without valid licenses. The district has a large adivasi population whose ignorance may be exploited by the money-lenders.

By June 1956 there were 1619 cooperative credit societies and 57 forest labourers' societies, set up to cater to the rural population's credit and other needs so as to weed out the money lenders. In the case of scheduled tribes, the percentage of beneficiaries and amount disbursed have out-stripped their actual share of the population. The same is the case with the scheduled <sup>caste population</sup> classes, which would include non-tribe tribes, have also been covered by these cooperative societies. The Forest Labourer's Societies have a comprehensive programme for the all round development of adivasis. These societies are given financial and other help by the government to facilitate their operations.

The lead bank in this district is the Bank of India. It has various financial assistance schemes including the sericulture scheme and the assistances given to fishermen.

## 6 Social Services

The backward classes are classified into 3 major categories:

- i) scheduled Castes or Harijans
- ii) scheduled Tribes or Adivasis
- iii) Other Backward Classes who are socially and economically backward.

This category includes:

- a) Kay Sondhas - Scheduled Caste converted to Buddhism
- b) Tribals residing outside the scheduled and specified areas of Vidharba
- c) Nomadic tribes - which includes Shinars
- d) Visukta Jatis i.e. denotified communities.

A number of schemes have been started for the educational upliftment, economic rehabilitation and social welfare of these backward classes.

#### 7 Zilla Parishad schemes

The Zilla Parishad of Chandrapur has been implementing various schemes during 1980-81.

- i). Social Welfare Department: Under the Tribal sub-Plan, two schemes viz. construction of irrigation wells and development of land, purchase of agricultural implements, fertilizers for backward class cultivators, were undertaken in 1980-81. The beneficiaries under these 2 schemes were mainly scheduled castes and scheduled tribes. Some benefits have also gone to other categories, mostly belonging to the other backward classes.

Various agricultural development and financial assistance schemes were also implemented by the Department of Social Welfare under other heads viz. Plan schemes, Non-Plan Schemes and Zilla Parishad schemes.

ii) Animal Husbandry Department of the Zilla Parishad implements schemes which covered with animals, fodder development among others, to tribal and non-tribal beneficiaries.

8 Small Farmers Development Agency (S.F.D.A.)

This scheme is being operated in all the 18 P.W. blocks. It covers agriculture, including fisheries, animal husbandry, minor irrigation, rural artisans and I.T.I. Both the scheduled castes and tribes are well represented amongst the beneficiaries of this scheme.

9 Voluntary Organisation

There is a marked dearth of voluntary organisations working in this area, which is evidence of the neglect in this district. The Maharashtra state gazetteer (1973) has identified 2 organisations working with the backward classes of Chandrapur district, viz. Mahiveshi seva sangh, Brahmpuri and Kanchanvel sikhani sansthan, Rajura.

10 Bhimars

This is a caste of fishermen and palanquin bearers. Bhimars, according to Grose (1974) originally were descendants of primitive, non-aryan tribes (names of the tribes not mentioned) but their occupation as palanquin bearers, cooks and house hold servants has resulted in their promotion to a group of ceremonially clean castes. Thus there has been a change of status from tribe to caste.

This makes the social status of the Dhimar a peculiar one. On the one hand, being ceremonially clean brahmins in northern India will take water and food cooked in butter from his hands. But on the other hand by origin, he belongs to the primitive or non-aryan tribe, a fact borne out by his appearance and customs. He eats crocodiles, tortoises and crabs in some Naratha districts.

Occupation : Occupations engaged in by the Dhimar, other than fishing, include growing water nuts in tanks, carrying water for Hindus, selling sweet potatoes at the fields, selling parched gram and rice to travellers in markets and railway stations, and rearing cocoons of the tasar silk worm.

Tasar Rearing : According to Crooke, while the larva are feeding on leaves and spinning their cocoons, these men live in the forests for 2 months and watch the Asa-basis or silk gardens. During this period, they eat only once a day, abstain from meat and lentils, from shaving and from conjugal intimacy. They erect huts and remain on the spot, isolated from their families who regard them as being temporarily unclean.

Besides these tabooed activities, certain rituals are also performed at the beginning of the rearing season, when the carefully pollarded fodder trees are stocked with the young larvae in early spring, the rearers tie a silk thread round the first tree to be used and worship it as "Pat Deo or the God of the silk thread". After the harvest period, the chrysalids which have been extracted from the cocoons, "must then be eaten by the caretakers who have to be ceremonially re-admitted into the society of their fellows" (Crooke 1974).

### Social Life

Marriage is prohibited between members of the same sect and between first cousins . A custom exists among the poorer Dhimals of postponing marriage to avoid expenses. The man and woman will live together and the religious ceremony will be held sometime in old age.

The dead are usually buried; cremation being too expensive.

Social sanctions: Permanent expulsion from the caste is inflicted only for marrying, or eating regularly with a man or woman of some other lower caste; but in the case of unmarried persons, the latter offence may also be expiated. Temporary expulsion is imposed for killing a dog, cat or squirrel, getting maggots in a wound, being sentenced to imprisonment or committing adultery with a person of any lower caste.

Religion- One of the principal dieties of the Dhimals is "Dulha Deo."

## Tassar Silk Rearing in Chandrapur District

1.1 Tassar silk is spun by the tassar silk worm *Antheraea Mylitta*, which is a wild non-mulberry silk-worm reared outdoor mostly on forest food plants. In Chandrapur district, the silk worm have been traditionally reared on the 'Ain tree' (*Terminalia Tomentosa*) which are found in abundance in those forests and now rearing is also being introduced on 'Arjun Trees' (*Terminalia Arjuna*) in the form of economic Arjun tree plantations. The Arjun tree plantations have been recommended by the Central Research & Training Institute at Ranchi. The Arjun tree is a quick growing species, which when grown using a particular technique, can be used for rearing by the third year of planting. But the fourth year maximum foliage yield can be made use of by the rearers:

### 1.2 Types of Crops

i Seed Crop: Here the cocoons are allowed to develop into moths which are then used for laying eggs and further multiplication of the seed crop.

---

\* Ref: ISTP revised report.

11 Commercial Crop: Cocoons are not allowed to mature. The pupae are prevented from metamorphosing into moths. These cocoons are used for silk extraction.

1.3 Varieties of Cocoons and Cropping Patterns\*

- 1 Daba - best quality silk (native of Bihar)  
 - bivoltine (2 crops a year)
- |          |                    |
|----------|--------------------|
| 1st crop | June- August       |
| 2nd crop | September-November |

- 11 Bikinda Hybrid - A cross of Anshra local and Daba (Bihar)  
 - Trivoltine (3 crops a year)  
 Season - June to February

- 111 Bhandara Local or Mulki (Chandrapur + Bhandara District)  
 - Multivoltine (more than 3 crops a year)

---

\* DCVL



a) 1st crop - 1st seed crop

Season - June-July

- Seed cocoons collected from the jungles, normally done after holi.
- After the rains, moths emerge from which the eggs are bred.
- This crops is attempted only by seed growing rearers.

b) 2nd crop - 2nd seed crop

Season - September-October

- Further multiplication of seed crop.
- These are now made available to all rearers.

c) 3rd crop - November to February

- Attempted by all rearers.
- Commercial crop sold to procurers.

#### 1.4 Existing Patterns of Grouping and Rearing

Maliki or Bhandara local is the common, native variety reared in Chandrapur district. Daba and Sukinda hybrid have been introduced in some pockets.

Distillers rear Maliki and only when they cannot collect Maliki seed cocoons from the jungles, do they normally accept Daba and Sukinda varieties.

#### Number of Crops Undertaken/Year

The general discussions revealed that earlier 3 crops were taken, now only commercial crop is undertaken.

Survey of the sample households shows the following:

3 crops undertaken by 8% of rearers  
 2 crops undertaken by 11% of rearers  
 1 crop undertaken by 81% of rearers.

### 1.5 Rearing Process - Stages\*

Grainage Operations - production of Layings from seed cocoons and their storage in a cool place.

#### Stages

- Moths emerge in the morning.
- Female and male moths kept in separate baskets.
- Pairing done to bring about fertilisation.
- Eggs laid by each female moth in 3 days in separate baskets.
- The eggs are washed in 1% formalin solution to destroy pebrin spores and stored in leaf cups - with the date of layings marked. These treated eggs of a moth are called DFLs (Diseases Free Layings).
- The female moth is crushed, a paste made and examined under the microscope for the viral disease, pebrin - if found to be present - layings of that moth are destroyed.

---

\* DCVL.

### Field Operations

- Eggs hatch after a period of 9-10 days.
- 'Char' leaf cups containing larvae are attached to leaves growing on pin trees in the forest rearing site.
- Larvae emerge and start feeding on leaves.
- In the wild 'Ain' forests, branches with larvae cut when its leaves are consumed and put on other trees to facilitate transfer of larvae.
- In economic plantations of Arjun, the trees are planted in a 4' x 4' configuration - with the crowns of the trees touching - thus negating the need for cutting branches to facilitate transfer of larvae.
- Larvae feed on foliage, grow in size, and undergo a total of 5 molts.
- In the last stage, the larvae begin to spin the cocoon.
- Collection and grading of cocoons.

INSTITUTE OF SOCIAL STUDIES TRUST

Impact of Tasar Silk Development Program

SCHEDULE - I - Village Information

District \_\_\_\_\_  
 Tehsil \_\_\_\_\_  
 Name of village \_\_\_\_\_

		<u>1971</u>	<u>1981</u>
Number of Households			
Population	Male	_____	_____
	Female	_____	_____
	0-14	_____	_____
	15 and above	_____	_____
Number of literates			
Main tribe	1		
	2		
	3		
	4		
	5		
	Castes	1	
		2	
		3	
		4	
		5	

		<u>Amenities</u>	
		<u>Distance from village (KM)</u>	<u>Roads Kutchha Pucca</u>
1.	Education	a) Primary	
		b) Secondary	
2.	Health	a) Sub-Centre	
		b) Primary health centre	
		c) District hospitals	
3.	Bank		
4.	Post Office		
5.	DCVL		
6.	Police Station		
7.	Electricity		
8.	Drinking water supply	a) Well	
		b) Hand Pump	
		c) River/pond/lake	
9.	Water for other purposes	a) Irrigation	
10.	Nearest town		

---

	<u>Acres / Hectre</u>
Total area of village	
Area cultivated	
Area irrigated	
Main crops grown	
Use of forest land	
Natural resources	

---

<u>Landholding</u>	<u>No. of households</u>
Landless	
Less than 2 acres	
2 - 5 acres	
5 - 10 acres	
10 - and above acres	

---

<u>Occupational classification</u>
Agricultural labours
Owner cultivators
Landowners who hire labour
Others

Remarks

INSTITUTE OF SOCIAL STUDIES TRUST

Impact of Tasar Silk Development Program

SCHEDULE II A - - Household Survey

Name of respondent

Head of household

Male

Female

II Land holding

Acres/Hectares

1. Land owned

Number of pieces

2. Land cultivated

3. Percentage of land irrigated

Specify source

4. Main crops grown 1

2

3

4

5

5. Net income from farming

6. Status - owner cultivator/  
tenant/share cropper

Owner-cum-tenant  
cultivator

Other-specify

Family details

S. No.	Name	Relationship to head of household	Age	Sex	Level of literacy	Occupation	Remarks



IV Workers (Family members)

S.No.	Tasks	Hours of work	Nature of Employment	Seasonality	Income		Days of work in the year
					Daily	Monthly	

6

V REARING

- 1 Is it your traditional occupation Yes/No
- 2 How long have you been working on Tasar Rearing and with which organization
- |    | <u>Organization</u> | <u>Years</u> |
|----|---------------------|--------------|
| a) |                     |              |
| b) |                     |              |
| c) |                     |              |
- 3 Location of rearing site
- |           |                |
|-----------|----------------|
| i) Forest | ii) Plantation |
|-----------|----------------|
- a) Area
- b) Royalty  
per year  
per hectare
- 4 Do you use the forest only for rearing Yes/No  
If forest is/was, used for any other purpose, Specify

VI SEED COCOONS

- 1 From where do you obtain see cocoons
- a) Jungles
  - b) Other rearers
  - c) DCVL
- 2 What are the problems you face regarding seed cocoons. Specify
- Availability on time
- Amount
- Supply
- Price
- Social inhibitions

- 3 Do you use DFLs provided by DCVL Yes/No  
 If no, specify reasons  
 If yes, how many DFLs do you get at present  
 Has your production gone up because of this Yes/No  
 If yes, by how much.

## VII CAPITAL

### Loans

Amount borrowed 78 79 80

- i) For rearing  
 ii) For other purposes  
 (specify)

### Details of Loan Taken

- i) Source from which loan taken  
 ii) Rate of interest  
 iii) Amount repaid  
 iv) Default if any  
 v) Reasons for default  
 vi) Mode of Payment  
 a) Sale of produce  
 b) Other means (specify)

### Utilisation of Loans

- a) For rearing (Rs.)  
 b) For other purposes (Rs.)  
 (specify)

VIII A Production 78 79 80

- i) Amount spent on purchase of seed cocoons (Rs.)  
 ii) Other expenses incurred in rearing (Rs.)  
 iii) Quantity produced Khaadi/Tori

B Income  
 From cocoons produced (Rs.)

- C Crops  
 i) No. of crops taken  
 ii) Condition of crop (unsatisfactory, fair, good).

IX Marketing of Cocoons

A DCVL

- i) Since when are you selling your cocoons to DCVL?  
 Details of sale for last 3 years.

---

<u>Years</u>	<u>Amount of Cocoons Khaadi/Tori</u>	<u>Price/Unit</u>	<u>Income (Rs.)</u>
1978			
1979			
1980			

---

- B List the other agencies to whom you sold your cocoons prior to DCVL

---

<u>Agency</u>	<u>Amount of Cocoons Khaadi/Tori</u>	<u>Price</u>	<u>Income (Rs.)</u>
KVIC			
Private Businessmen			
Others			

---

X Credit

- 1 What was the source of finance before Bank of India
- 2 Do you continue to borrow from money lenders. If yes give reasons.
- 3 Do you need additional finances from the Bank. If yes, for what purpose.
- 4 Do you avail of any other credit/development scheme? If yes, specify.

Qualitative Information

A DCVL Specific

- 1 Are you satisfied with the manner in which the DCVL handles the seed cocoons. If not why?
- 2 Are you satisfied with the DCVL policy of giving one hectare per rearer?

3 Do you feel that the price given by the DCVL for your cocoon produce is appropriate? If not - how much do you expect.

4 According to you, in what way could you improve cocoon production (specify).

5 What are the problems faced by you. How do you suggest they be solved?

6 Of the 3 (i.e. private, businessman, KVIC and DCVL) which do you prefer. State reason why?

B General

7 What are your future plans to improve your standard of living.

8 In your opinion, are any steps being taken to increase agricultural production by the government or any other agency.

9 How will an increased in your agricultural production affect Tasar rearing undertaken by you (tick choices)

a) Would you still engage in rearing

b) Would you still divert loans for agricultural production?

c) Any other effect (specify)

Social

- 10 i) Given an option would you pursue Tasar rearing.
- ii) What is your view about spinning/reeling of tasar yarn.
- 11 i) Is there any organisation to represent the interests of the rearers to the employers (DCVL)
- ii) Have any attempts been made to organise yourselves? If yes, what was the response of:
- a) The rearers
- b) The DCVL
- iii) Would you like to participate in the policy making decisions of the DCVL. If yes, how do you suggest it be done.

Social Aspects - Rearing

- 1 Do you attach any ritual significance to Tasar rearing?
- 2 Are there any taboos regarding rearing. If yes, do you adhere to them strictly?
  - 1) General taboos
    - ii) Women specific taboos
- 3 Do you recall the origin of these rituals/taboo?
- 4
  - 1) Does your father/son or other family member engage in Tasar production - Yes/No.
  - ii) What are your views about it?
  - iii) How do other castes/tribes perceive tasar rearing?
  - iv) If rearing was to become more income generating would the existing attitude change?

Personal

- |                                     | <u>M</u> | <u>F</u> | <u>MC</u> | <u>FC</u> |
|-------------------------------------|----------|----------|-----------|-----------|
| i) Where do you defecate            |          |          |           |           |
| ii) When do you defecate            |          |          |           |           |
| iii) What is the distance from home |          |          |           |           |



TIME ALLOCATIONDuring Tasar Rearing Season

I Daily Time spent in the various Tasar rearing tasks	<u>Male</u>	<u>Female</u>	<u>Male Child</u>	<u>Female Child</u>
a)				
b)				
c)				
d)				
e)				
II Other occupations engaged during Tasar Season				
<u>Domestic Work</u>				
Cooking				
Washing				
Child Care				
Fetching water				
Fetching fuel				
Others				

Time Allocation During Non-Tasar Rearing Season

<u>Occupation</u>	<u>Male</u>	<u>Female</u>	<u>Male Children</u>	<u>Female Children</u>
-------------------	-------------	---------------	----------------------	------------------------

Domestic Work

Cooking

Washing

Child Care

Fetching Water

Fetching Fuel

Others

Allocation of Income

- 1 How far is DCVL from village
- 2 Who is responsible for sale of cocoons
- 3 Is the money kept by the
  - male head
  - female head
  - in the family pool
- 4 Who decides on expenditure. Male/Female/Jointly
- 5 Amount incurred per month on
  - Food
  - Clothing
  - Housing
  - Medicine
  - Entertainment
  - Others

Some agencies - Indian and others, that could be used for facilitating:

Training and awareness building:

1. Mobile Orientation and Training Team,  
7, Sial Layout  
Sita Ramdas Road  
Nagpur

Contact person : Father Volken - Volken

2. Self-employed Women Association  
Gandhi Reception Centre  
Opposite Victoria Garden  
Bhadra: Ahmedabad-38001

Contact person: Ms Ela Bhatt

3. Centre for Cultural Resources and Training  
Bhawalpur House  
Sikandra Road  
New Delhi - 110001

Contact person: Ms Premalata Puri  
(Director)

for conducting workshops on

using local resources, art and culture  
for awareness building programmes

4. Literacy House,  
P.O. Singer, Nagar  
Lucknow-5

Contact person: Mr Sharma

For information on education, occupational skills,  
demonstration farms, training programmes for Panchayat  
leaders and Integrated Block Development.

Two publications which would be useful for  
facilitating:

A From the field - published by World Education

B The village decides - published by save the  
children fund

5. National Institute of Public Cooperation  
and Child Development,  
Ministry of Social Welfare,  
Siri Institutional Area,  
Haus Khas, New Delhi-110016

for training programmes.

## II Implementation

1. Gram Vikas Sewa Mandal  
Nag Vidarbha Charika Sangh  
Post Mal,  
District Chandrapur  
Maharashtra-441 224

Contact person: Mohreshwar Wadlakondavar  
(Secretary)

- 2 Chetna Vikas ✓  
Seva-Gram  
Gopuri  
Wardha

Contact Person: Padmaja Bang

- 3 Jagruth Adivasi Sanghatana  
Post: Nagepalli  
Taluka : Aheri  
District: Chandrapur : 442 703

Contact person: B.V. Shekhar

4. Jansangharsh Vahini  
Tonderis House  
Gandhi Chowk  
Chandrapur

Contact person: Mohan Kirabai Heeralal.