

**Study of  
Community Lift irrigation schemes in  
Wardha and Yavatmal Districts of  
Maharashtra**

*Supported by*

**IWMI - TATA Water Policy Research Programme**

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## Executive Summary

The Phase – I of the Central India Initiative of the IWMI Tata Project aims to study a sample of six to seven cases where significant changes in the lives of tribals have occurred due to water availability. The aim is to develop a model for scaling up the efforts by commissioning independent researchers so as to cover a much larger geographical area in the country. The present study of “**Community Lift Irrigation Scheme of Assefa in Wardha and Yavatmal Districts of Maharashtra**” is an effort in this direction. The study was done in a non-assessment mode in that effort was made to understand the processes that were involved in implementing the scheme and the changes that it has brought about in the people. The findings of the study are those of the author and in no way reflect on the quality of work done. The Association of Sarwa Sewa Farms (ASSEFA) is a Gandhian NGO that has done pioneering work through out India in the area of land reforms and community organization. In Maharashtra its work was focused in the districts of Wardha and Yavatmal. The Community Lift Irrigation Scheme was part of an integrated approach towards development of land belonging to the marginal farmers especially the tribals. The Kolams and Gonds constitute the major portion of the scheduled tribe population in the two districts. The Kolams have a rich tradition and once ruled the entire CP& Berar province. Over the year’s lack of education and access to formal power have created a situation wherein they have been marginalized and are now in minority and depend on agriculture based livelihoods. With the enactment of land ceiling regulations most of them have received portions of land but they still derive a significant portion of their annual income from farm and non farm labour activities. During the decade of eighties Assefa implemented 61 schemes of which 30 are operational today. During the current study 28 small and 1 large scheme were studied. The methodology adopted was personal interview, group meetings and discussions with villagers and NGO staff. A video recording of the proceedings of the meet was also done at Mahadapur. The discussions were recorded and later on transcripts were prepared. At the NGO level documents that were available and records as maintained were also reviewed.

The findings of the study indicate that for Assefa its insistence on integrated development, which included land reforms as well have had a positive impact on the water availability and also on crop yields. Demonstration and Exposure visits are an important source of motivation and that mere provisioning of infrastructure would not help. In the areas of transfer of ownership of assets, beneficiary selection, the difference of opinion on issues such as likely benefits of an additional crop versus the opportunity of wage earnings elsewhere Assefa and GSST have had difficulty. As against the potential of over 240 hectare created; one third is being in use today (87Ha). The size of the group is an important consideration and one would like to assume that a group of 5 is more likely to be more stable. Of course the same needs to be validated separately. Agreements and Documentations that are often part of any project seemed to have had little impact in that it is rare that an NGO would file a suit for recovery of money or assets. Complexity of project design is also a factor that merits attention self-sustainable projects involve interrelationships between different agencies this is something which the beneficiary may not understand. Another issue is that of external dependencies of a project. Energizing wells is an important part in creating demand for irrigation but this is based on the policies of the state government and electricity boards. In the changed economic scenario one has to see the priorities of the state board’s. The high energy cost and low economic returns from agriculture are likely to emerge as major impediments to demand for irrigation.

For a complex issue such as livelihood enhancement of the tribals there cannot be one sure way or method, which can be universally applied. Even when we look at water as one of the intervening area there are several ways in which one can go about. On one hand is a supply based approach such as digging up more wells and making water available so that people would tend to follow the initiators and their cropping pattern and will soon catch up with the others in

the community. But it is an expensive process. Water is but one of the intervening variable's and in reality as far as livelihoods is concerned the tribal has more choice than what we have. This is something that has to be factored in.

*Do micro watersheds better address the question of demand?* The case writers interaction at Rajani where Assefa/Gsst has implemented a watershed development programme and also a community lift irrigation programme seem to suggest so. After completion of the watershed programme there has been perceptible increase in ground water (a fact corroborated by independent agencies) as a result of which fodder availability is better and many villagers are considering dairying as an option to supplement their income. Many of the farmers have also invested in sinking bore wells to draw water. The drinking water problem of the village has also been addressed.

The author would like to thank Dr. Tushaar Shah at IWMI for providing this opportunity of associating with IWMI, Dr. S.J. Phansalkar for reviewing the drafts and offering constructive suggestions. I would also like to place on record the support provided by Shri. S.P. Mankar, Secretary, Gram Swaraj Sewa Trust, Wardha and his entire team for providing access to all documents and assistance during the field visits.

## **Background of the Study:**

### The Central India Initiative

Central India Initiative is part of a joint effort by PRADAN, NM Sadguru Water and Development Foundation and the IWMI-TATA Water Policy Programme, which aims to document the experiences of tribal communities in adoption of livelihoods based on small scale water harvesting and irrigation methods.

A two-day workshop on “Research Methodology” for the research authors was held at Anand on July 2-4, 2002. The workshop was held with the objective of familiarizing the present and the likely authors who might be involved in the case writing exercise. Accordingly a request to submit a proposal for conducting study in Wardha was made by Mr. Manas Satpathy of Pradan and Mr. Vaibhav Bhamoriya of IWMI to the author. As per the terms of reference dated August 21st, 2002 the study on “Community Lift Irrigation System in Wardha and Yavatmal Districts of Maharashtra” was conducted with a view to,

1. Study the Community Lift Irrigation System in Wardha, Maharashtra and document the experiences of the tribal community in their shift from traditional occupations to farming, and
2. Look at the impact water had on the livelihoods of the people given the fact that there was considerable time gap between access to land and access to water

More specifically the proposed study would focus on understanding,

1. The social processes that led to successful working of 2 large societies and 14 smaller groups
2. The efforts aimed at Community Organization among Tribal Community
3. The experience of smaller vs. larger groups that manage these water resources
4. The possible reasons for the failure of the remaining groups
5. The technical and operational details of the scheme including the maintenance of community assets
6. The impact of water availability on cropping pattern, employment cycle and poverty
7. Bottlenecks, if any, in the process of development as perceived by the tribals

As agreed and discussed in the August workshop, the output of the present study was to have been in the form of a case study.

### Organization of the present report:

In accordance with the ToR the report is organized as under,

Section 1 provides the organizational background and the philosophy of Assefa for taking up community initiative

Section 2 provides details of Methodology Adopted and other related issues related to the study

Section 3 provides the technical and other details of the two schemes

Section 4 discusses the issues that have been outlined above

Section 5 provides a summary of key learning's from the Wardha experiment

Two detailed case studies, The Small Unit Scheme and Jawahar Adivasai Ursa Jalasinchan Ltd, Mahadapur along with the relevant Annexures and Tables are also enclosed at the end and form part of this report and are given in Section 6.

However this is not a report that assesses the work of an organization but is an effort to look at the multiple challenges that are involved in implementing community based scheme in a challenging environment. With a view to ensure objectivity the case writer's observations and comments are provided in section 5 that deals with learning's from the Wardha experiment.

## **Section I**

### About ASSEFA/GSST

Association of Sarwa Sewa Farms (ASSEFA) started as an experiment in collective farming on a neglected bhoodan lands and evolved over the years into a wholistic people's movement that reaches over 2500 villages in six states. The Maharashtra operations were started in 1979 with the establishment of training centre at Dattapur, Wardha for Bhoodan workers. Initially the work of sarva sewa farm was limited to bhoodan allottees subsequently with the objective of holistic development of the village community it was decided that the organization would work for all the people in the village. The work in Maharashtra started in 152 villages in Wardha and Yavatmal. In selecting the villages care was taken to ensure that Assefa reaches out to villages that are far off in the interiors and lack even basic amenities. In many cases these were hamlets of about 15-20 houses where the government machinery would take considerable time to start any development activity.

In 1997 Assefa decided to withdraw from the state of Maharashtra. Gram Swaraj Seva Trust was set up by Shri S.P. Mankar the erstwhile State Project Coordinator for Maharashtra and other development workers to carry on the work initiated by Assefa. The project was fully implemented in 2001 with the support of Sir Ratan Tata Trust.

### Wardha and Yavatmal Districts - Profile

The districts of Wardha and Yavatmal are located in the eastern part of Maharashtra commonly referred to as Vidarbha. The work area of Assefa Maharashtra was concentrated in the Painganga and Wardha river valley. The eastern part Yavatmal is known for its rich forest cover and this is also the region where there is significant tribal population. In Wardha district as one moves north there are pockets of tribal population in the Aarvi and Karanja Taluka. There is some forest cover in Aarvi and Karanja Taluka of Wardha and most of the tribals are located in these areas. The rest of the regions economy is cotton driven. Other cash crops such as Banana and Sugarcane are mostly grown in villages through which the wardha river flows. Orange orchards are few and are mostly in the north wardha. As cotton is the dominant crop of the area, in the past there were no possibilities of taking rabi crops as irrigation facilities simply did not exist.

The region receives good rainfall of about 1200 mm per annum. The undulating structure of the land however makes it difficult to store water and ironically the districts face water shortage during summers. The state has created necessary infrastructure by way of small irrigation projects that have a command of 200 hectares or so.

In the absence of any large industrial base most of the people are dependent on agriculture. Alternate employment opportunities exist in service sectors at the district place or in Nagpur, the largest city nearby.

The south-eastern part of the Yavatmal district and Wardha North-East are parts that have significant tribal population. Gonds, Kolams and Pardhans are major tribes. A note giving the historical perspective of Gonds and Kolams is appended to this report. The schemes were implemented in villages that had predominantly Gond and Kolam population.

### About ASSEFA's Strategy

The driving force behind Assefa is the Gram Sabha. All the loans granted by the kosh (an NBFC, sister concern of Assefa) are based on the recommendation of the gram sabha and the recoveries are credited to the revolving account of the gram sabha. According to Mr. S.P. Mankar, Secretary of Gram Swaraj Sewa Trust, Wardha and Ex-State Project Coordinator of Assefa in Maharashtra “the stress of Assefa had always been on community. In planning and implementing any initiative community involvement is key and Gram Sabha is the mechanism through which these were to be implemented. For improving the financial condition of farmers it was necessary to intervene in the area of irrigation as without which there can be no concrete development in the rural areas. Here too Assefa provided the necessary support such as inputs such as seeds and fertilizers, wells, bullocks, farm implements, storage places, marketing support etc. We felt that the community method was the most cost effective method to the needs of the farmer. Since capital support was scarce, it was only when assets were shared that they could be used best. Then there were other associated benefits as well. Coming together of people was also likely to remove caste, class differences, generate empathy among the larger farmers for the downtrodden etc.”

To finance these initiatives Assefa insisted that any form of grant or loan would be given to the gram sabha only and that the members could obtain a loan from the gram sabha. This was done with a view to ensure sustainability of the gram sabha through creation of a revolving fund.

## Section 2

### Methodology Adopted and other related issues related to the study

The community lift irrigation scheme design was based on water availability. At places where water was in abundance large schemes (more than 10 people) were implemented. In other places the beneficiaries were two or three families. By 2002 four (4) large schemes and fifty one (51) smaller schemes were implemented by Assefa/GSST. Out of 4 large schemes, one scheme i.e.. Jawahar Adivasi Upsi Jalsinchan Sahakari Sanstha Ltd, Mahadapur has been studied in detail. Annexure 2 provides the detailed facts of the scheme. Out of 51 small units that have been set up so far, 23 units are now part of the urban area of Wardha District. In such cases the agriculture land has been converted into residential plots and therefore it is not possible to trace the original owners of the land. At present 28 units are functional of which 9 were studied in detail by the case writer. The villages were selected with the help of field staff of the NGO. The village were chosen in such a way that they would ensure enough range of responses. In addition, a short and focused survey aimed at collecting information about land ownership and cropping and water usage pattern etc was also undertaken in all the 28 villages. All the beneficiaries of the schemes, which are operational were covered in this stage.

In studying the respondents initially a structured questionnaire was thought appropriate. The text of the questionnaire is attached at page no. 35. However on field it was realized that,

1. Sticking to a questionnaire schedule may not be the right way to obtain information from the respondents as they become conscious and become uninterested within a short span of time especially when we offer nothing in return.
2. In general there is apathy towards questionnaires as the tribals in this region receive scores of people who fill up a form and do not return ever after. The region being remote and virtually cutoff from the main civilization in the past there have been instances where the tribals were demanded money for filling up "their forms".
3. In view of the time constraints both of the researcher and that with the farmer, it would be prudent to have a one to one dialogue with the concerned farmer. Care was taken to interrupt the farmer wherever necessary so that responses to these issues could be elicited. The individual conversations were recorded using a tape recorder.
4. The researcher also spent time in meeting farmers and other members of the community in an informal setting wherein the issues mentioned in the questionnaire was obtained similarly an effort was also made to understand the community and its immediate concerns. Individual meetings were held at nine units and a meeting of gram sabha was called for in village Mahadapur. There has been no attempt made at making any kind of conclusions what so ever. The information as obtained from the farmers has been further corroborated with the project director and NGO staff.

### **Section 3**

This section provides the technical and other details of the community lift irrigation schemes implemented by Assefa.

Assefa started its work related to development of Bhoodan lands in 1970s. The scope of the work was later extended to involve other communities as well. The guiding philosophy of Assefa was to ensure optimum use of available resources with least cost. In view of the high cost of digging a well and also the related infrastructure, it was decided that community approach would best serve the needs of the community and therefore depending on the water availability and peoples willingness to come together such community lift irrigation schemes were promoted.

The available water was divided on the basis of irrigation requirement of one hectare of rabi crop such as wheat or gram. The number of beneficiaries were then decided. If the water availability was more larger schemes were promoted e.g the Jawahar Scheme at Mahadapur that has 19 members or smaller 2-3 person units were promoted.

A work contract was entered into between the concerned gram sabha and the labours who undertook the work. The contract agreement would specify the nature of work to be one as also the payment that is to be made. The contract term included cost of the material as well.

The well was inspected by a team of officers from Assefa for the work done and handed over to the beneficiaries. The beneficiaries had to enter into a Memorandum of Understanding (MoU) for sharing of water and maintenance costs. The MoU also provides for action that would be taken in case any of the parties to the agreement fails to honour his word. The person on whose field the well was situated was required to sign a gift deed in favour for Assefa for that piece of land. This was done so as to prevent ownership claims at a later date.

The members were required to sign a Memorandum of Understanding on Rs. 20/- stamp paper for sharing water, expenses etc. The person on whose land the well was situated transferred the ownership of that parcel of land to the NGO by way of a gift deed. The agreements were essentially “gentleman’s agreement” and there were no recorded instances where recourse of legal measures were taken for failure to stick to the terms of the agreement. Although the terms of contract provides for sharing of maintenance of costs it seldom happened in reality.

#### **The Wardha and Yavatmal Community Lift Irrigation Scheme:**

Each well unit comprised of 2 to 4 beneficiaries who were identified based on things such as water availability, need and desire to participate in community initiative. The scheme was started in 1989-90 and till date work has been undertaken in 63 units and 50 have been completed in all respect. The first phase of the scheme was completed by Assefa by 1997 when 37 well units were functional. 16 new units were completed during 2000-01. 53 well units exist as of now. The composition of the beneficiaries remains mixed. Of the 135 beneficiaries of the scheme 47 belong to Gond Tribe and 30 belong to Kolam tribe. The rest of the beneficiaries are from other communities mostly kunbi’s. The project was completed at a cost of Rs. 22.49 Lakh. Annex 1 provides the details of the investments made. Major investments were made in digging well -51 Nos at a cost of Rs. 1429.000,

Pipeline – Rs. 359,000 and Motor Pumps Rs. 255700. The decisions about the feasible site and other technical aspects was done in house by the NGO staff.

Electricity continues to be a major issue and there have been delays in sanction of power by the state board. Of the 50 well units, 6 have opted for diesel operated engines.

The details of the scheme including beneficiaries and command area etc are provided in the annexure.

#### The Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha (Sanstha)

The Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha with an initial capital of Rs. 11,000 (11 members each contributing Rs. 1000) was registered as a society on 2 September 1989. The first project of the Sanstha was a lift irrigation scheme on the Kolhapur Type Weir constructed by the government that would have a command of 12 hectares and benefit 14 people. In the second phase 6 new members were added to the scheme and the command area increased to 18 hectare. In the third phase a separate community well lift irrigation project called patalganga was proposed. The patalganga project benefitted 10 farmers and had a command of 12 hectares.

Of the total project cost of Rs. 3.05 Lakh, ASSEFA contributed Rs.2.40 Lakh and the balance was raised as loan from the bank. A few farmers also got government subsidy amounting to Rs. 9,000. The beneficiaries contributed own labour. The entire project was completed at a cost of Rs. 3.71 Lakhs. “A similar project would cost anywhere between Rs. 5-6 lakhs if an outside agency would have implemented the scheme. The savings on costs directly helped reduce the loan liability of each member” Mr Mankar says.

It was agreed that each one would take only so much of crop as can be irrigated in 24 hours of continuous pump operation. This roughly translated into an acre of wheat or gram. Although this was the upper limit a farmer could irrigate more land if he is able to do so with in the allotted time.

The scheme document provided that the expenses on repairs, power and management charges will be shared equally by the farmers. The scheme also provided that the maintenance charges shall be recovered in advance by the farmers. The loan was recoverable in maximum ten annual installments by the society and it was at liberty to decide ways and means to recover loans from members.

The project was implemented in three phases.

#### The Jawahar Adivasi Upsa Jal Sinchan Unit-I (KP Type)

The first phase of the scheme was called Kolhapur Type Scheme as it was a lift irrigation scheme on the Kolahpur Type Weir on Dham river. The 14 beneficiaries were marginal farmers and each one of them was the recipient of land under the government scheme. The project had a command area of 12 hectares. The scheme envisaged installation of a 10 hp electric pump and laying of 1000 mts of pipeline.

The total cost of the project was estimated at Rs. 130,000/- as under,

Particulars	Amount (Rs.)
Pump with accessories (10 Hp)	20,000
Provision for 1000 mts pipeline 140 mm diameter and 6 kg pressure	100,000

Pumpshed	5,000
Foundation for pump	5,000
	130,000

The project was completed in 1989 at a cost of Rs. 130,458/- in six months. Bank of India, Morangana sanctioned a loan of Rs. 79,541/-. The project received a subsidy of Rs. 43,825/-. The cash equivalent of people's contribution was Rs. 7,092/-. The Jawahar scheme envisaged that there would be a net addition of Rs. 71,250/- to the net income of the fourteen beneficiaries. The following table provides the details,

Crop	Production (Qtls)				Rate per Qtl(Rs.)	Income (Rs.)		
	Area	Now- Post project	Earlier	Net Addition		Gross	Expense	Net
Cotton	6	5	15	10	800	48,000	15,000	33,000
Jowar/Ground Nut	6	12.5	25	12.5	150	11,250	3,000	8,250
Wheat/Gram	6		25	25	300	45,000	15,000	30,000
	18	17.5	65	47.5		104,250	33,000	71,250

#### The Jawahar Adivasi Upsa Jal Sinchan Phase - II

Surface irrigation was the preferred method for irrigating the fields and therefore there was a proposal to include a few more farmers in the neighborhood who in any case were indirectly benefited by the excess water that would overflow into their fields.

In the second phase an additional amount of Rs. 45,000 was spent on providing 400 mts of pipeline and distribution chambers and valves. The actual expenditure incurred was Rs. 73,383/-. One of the beneficiaries Vishwanath Nago Linge was eligible for subsidy by the government and agreed that the subsidy amount be directly deposited with the sanstha and adjusted against his loan account. The net cost therefore came to Rs. 65,383/-. The bank did not fund this proposal and Assefa provided the entire amount through gram sabha. Phase II was completed in 1992.

#### The Patalganga Lift Irrigation Unit (Patalganga)

On the other side of the village there was yet another group that was agreeable to the idea of community irrigation and requested Assefa to support their group. The project was called patalganga as it was well based scheme.

Under the scheme an open well in the private agriculture land owned by one of the beneficiary was proposed to be dug. The well would be supported by a 7.5 HP electric motor pump and pipeline. The well was dug on the bank of the main stream at the confluence of two distributaries. The streams had been provided with feeding watershed management by Assefa and soil conservation department of the government. A 690-meter underground pipeline was also planned.

The total cost of the project was estimated as under,

Particulars	Amount (Rs.)
Well - 10 Mts Diameter and 12 Meters Deep	50,523
Pipeline - 140 mm Dia, 4 Kg Pressure, 690 Meters	55,200
Pump set and accessories	20,000
Pumpshed	5,000
Total	130,723

The Patalganga project was completed in 1992 at a cost of Rs. 167,283/- in six months. The Bank of India, Morangana that had sanctioned the earlier loan did not support the proposal and the costs were met through a loan from Assefa. As had been the policy of Assefa the loan funds were to be repaid to the gram sabha.

The Patalganga scheme envisaged that there would be a net addition of Rs. 71000/- to the net income of the ten beneficiaries. The following table provides the details,

Crop	Area	Production (Qtls)			Rate per Qtl(Rs.)	Income (Rs.)		
		Now	Earlier	Net		Gross	Expense	Net
Cotton	4	7.5	2.5	5	800	32,000	10,000	22,000
Jowar	4	12.5	6.25	6.25	150	7,500	2,000	5,500
Wheat	4	10	-	10	300	24,000	10,000	14,000
Horticulture/Sericulture	2	2	-	-	20,000	40,000	10,000	30,000
	14	32	8.75	21.25		103,500	32,000	71,500

### Functioning of the schemes over the year's

The two schemes were part of an overall development initiative undertaken by Assefa since 1980s. It was expected that once water is available the people would be able to make use of the necessary infrastructure. Suitable inputs in the form of meetings and exposure tours were also part of the programme. The water that was available was first used to provide support irrigation to cotton. According to the discussions with the people one of the main reasons for growing cotton is the absolute surety about its sale and also the fact that the crop by itself requires little water and can survive harsh conditions including long dry spells. Even if one irrigates the cotton crop in February a farmer can expect about 50 kgs in an acre, which will fetch him a thousand rupees.<sup>1</sup>

The earlier practice of growing desi variety of Jowar was replaced by hybrid variety, which is an early maturing crop and can be sown in kharip season. Jowar is mostly grown for own consumption. To ensure better food security to tribals they were encouraged to grow wheat on the land that becomes available after Jowar. The retained moisture of the land and the support irrigation from the community well was supposed to ensure this.

As against the potential of 268 hectare of irrigated fields, the actual area irrigated in 2002 was 86.6 hectare. Much of this was under cotton (53.9 ha). The area under rabi included wheat (17.3 ha) and Gram (4.6 ha). Vegetables accounted for only 2.2 hectare.

<sup>1</sup> Discussions with the field staff and villagers

Few people if at all seemed convinced about the profits from cultivating vegetables. The tribals in zari were not very enthusiastic about the prospects of growing vegetables. In Wardha, nearness to two large markets Wardha and Nagpur provided enough confidence to the growers about the market problem.

The people of Mahadapur claimed that in the past they were able to get a total rabi crop of around 150 quintals. However, the actual number of members has gone down significantly and so also is the rabi crop production which is now in the region of 50 quintals.

Manik Rajaram Shirbhate (45) belonging to the Kolam Tribe received .90 hectare of land under the state government programme of land reforms commonly known as “ceiling land holder”. To support a family of four that include an unemployed son and old parents Manik used to supplement his income by working as a farm labourer even as his own land remained uncultivated for a majority of the year in the absence of any support irrigation facility. With a view to improve the financial status of the family GSST helped his father get a loan of Rs. 4,000 from the Sarva Jana Sewa Kosh to start a small tea and kirana shop. The GSST initiated a programme on community lift irrigation scheme in 2000 and further deepened his well that ensured water availability. In addition an electric pump and pipeline was also added. This reduced his dependence on rains for irrigating his land. For the first time Manik could take an additional wheat crop during the ensuing rabi season that would meet his requirement of food grain in the coming year.

Manik now works full time in his farm and has started cultivating summer vegetables such as Spinach, Tomato, Lady Finger etc. He has also sent his son to Nagpur to undertake a vocational training course.

The tribals received their land patta’s in the early eighties and it took almost ten years for people to get water for irrigation. The actual number of users of the scheme has significantly gone down over the years. Part of the reason for this is the financial condition of the some of the beneficiaries. A majority of them have to depend on earnings from wages for meeting day to day expenses and therefore savings for meeting expenses such as share of electricity and maintenance charges is a dream. Discussion with the farmers at Nimni and Palgaon villages in Zari block revealed that many a times a person became a member even though he had no capacity to share the bill and other charges only because of the fact that atleast some one will benefit because of his name. If they are in default over payment of charges they would not take the water from the well on their own. More about this aspect is discussed in the coming sections.

The following table provides details of usage pattern over the years in respect of the schemes.

	KP Type Scheme	Patalganga	Wardha	Zari	Total
Year of implementation of scheme	1990	1990	1991	1994	

	KP Type Scheme	Patalganga	Wardha	Zari	Total
Year	# of Users				
0	4	1	23	11	39
1	0		1		1
2	2	1			3
3	1			9	10
4			1	4	5
5	3			3	6
6	1				1
7				2	2
8	1		1		2
9		1		1	2
10	1		1		2
11					0
12	6	4	29		39
Total Users	19	7	56	30	112
<u>Current Status</u>					
Users	6	4	41	9	60
Non Users	13	3	15	21	52

One notices greater regional variations. The number of non-users as a proportion of total user is more at Zari block. One can speculate the possible reasons for this as,

- o The zari units are located at a distance of over 150 Kms as against Wardha units
- o Undulating land making it a high cost proposition for electricity boards to provide connections. As also the topography of the region does not allow for water retention and months of inaccessibility due to excessive rains are followed by water shortages beginning January
- o The concentration of government aids and schemes for tribals in areas that are closer to cities and hence suit the convenience of the implementers. Creation of model village
- o Proximity to a large city (Wardha) and taluka place (Aarvi/Karaja)

The discussions with the beneficiaries revealed that low water level, delay in sanction of electricity and practice of letting out farms were main reasons for non use of irrigation facility.

The following table provides the details.

Reasons for Non use	Wardha Area	Zari Block-Ytl	Total
1. Electricity Disconnected		2	2
2. No Electricity	6		6
3. Family Dispute	3		3
4. Farm Let out	5	4	9
5. Low Water Level	1	9	10
6. Migration		2	2

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7. No Pipeline		2	2
8. Prefers Wage Labour		1	1
9. Watershed Project Beneficiary		1	1
Total	15	21	36

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In the case of KP Type scheme at Mahadapur many people backed out on the issue of repayment of loan instalment as a precondition to water release. In the case of Patalganga project people opted for their own wells which they received under government subsidy schemes. Further some of the farmers also pointed out that some farmers have installed pumps of higher capacity on the dam and therefore water availability is considerably reduced.

#### **Section 4**

This section discusses aspects such as community organization, the social processes involved in the project implementation, water usage and pricing and changes in cropping cycle etc. that water availability has brought about in the project area.

##### Sectoral Shift of the Tribals:

The Gonds and Kolams have been categorized as food collectors<sup>2</sup>. Forest was a major source of livelihood for a majority of them. Even today collection of forest based produce such as Gum, Charoli, Grass, Tendu Leaves etc. or were engaged as agriculture labours with the local *ijardars* who were the traditional owners of vast tracts of land according to then prevailing system. Upon enactment of land ceiling act the excess land acquired by the government was redistributed to the tribals. In many cases the villages were resettled and the government provided them with the land and other infrastructure. According to the villagers they got the land during Late Mrs. Indira Gandhi's regime, which translates into early eighties. Few of the tribals however did own some piece of land.

The agriculture for a greater period was dependent on rains and it was after Assefa started its intervention in the area of village development that irrigation schemes were thought of.

##### Community Organization Efforts

The Gonds and Kolams are strongly knit communities and have a panch system which is akin to the formal gram panchayat. The committee has its own corpus and also conducts monetary transactions with the members of the village. During the initial days Assefa directly interacted with the beneficiaries however people's willingness which was crucial was not forthcoming. Mr.Mankar of Gram Swaraj Sewa Trust calls this as a learning phase and says that The Panch committee is important in that it has the power to debar anyone from the society.

##### Social Processes and Working

A broad three way classification based on the number of members of the units is possible. Large Group with more than 10 members, small ones with about 3 members and the middle ones (!) comprising of about 5 members.

The Mahadapur scheme comprises of a larger group (KP Dam, 19 members) and relatively smaller one (Patalganga, 6 members). The actual number of users for the KP scheme is 9 out of 19 and for Patalganga it is 4 out of 6 members. The units that had about 5-6 members were operationally better. This could be due to several reasons,

- o The group is large and yet not unmanageable
- o The requirements of leadership is different. It is relatively easy to manage a 45 people group. Informal leadership as against formal leadership

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<sup>2</sup> R.C .Verma, Indian Tribes Through the Ages, Publications Divn. GoI, 1990, pp224

- o Even one person has the potential of causing great disturbance in a smaller group. Whereas in a large group polarization may take place.
- o Small and Middle level units have the desired operational flexibility and therefore faster and informal decision making

Water Usage and pricing pattern:

The number of beneficiaries in a unit were determined on the basis of irrigation potential of a water source. The number typically varied between 2 and 5. It was agreed by the unit members that each would only take so much of water as would be sufficient to irrigate a hectare of land. Since the objective of the scheme was to ensure continued food security it was believed that a hectare of land would provide enough food grains for the family. This was in a way a reflection of the philosophy of equality and social justice that Assefa believed in.

There was no stated basis for pricing for water. The scheme design for small unit was based on equal sharing of all expenses such as electricity and maintenance. In the case of Jawahar Scheme the operational expenses were supposed to be met from the interest earnings of the corpus of the sanstha. Each member under the Jawahar scheme was required to pay his share of cost which was fixed at Rs. 570/- per annum.

However in reality the practices differed. It was commonly observed that other unit member invariably expected somebody else to pick up the charge. There was an informal arrangement that the other non paying members would payback the amount on harvest which never happened. The sole paying member there fore did not allow the others to draw the water. The Jawahar scheme consisted of two sub units one based on the Kolhapur Type Weir and the other well based called Patalganga. It was only for administrative reasons that they were part of the Jawahar scheme else there functioning was independent. The members of the patalganga scheme contributed towards the expenses as and when the need arose directly without any reference to the sanstha or the NGO. This is also the reason the same is not reflected in the accounts. On the other hand the expenses related to electricity and maintenance were linked to the repayment of loan. There were some problems with the scheme administration and the some of the members defaulted on the loan payment.

Changes in Cropping Cycle, Employment and Poverty

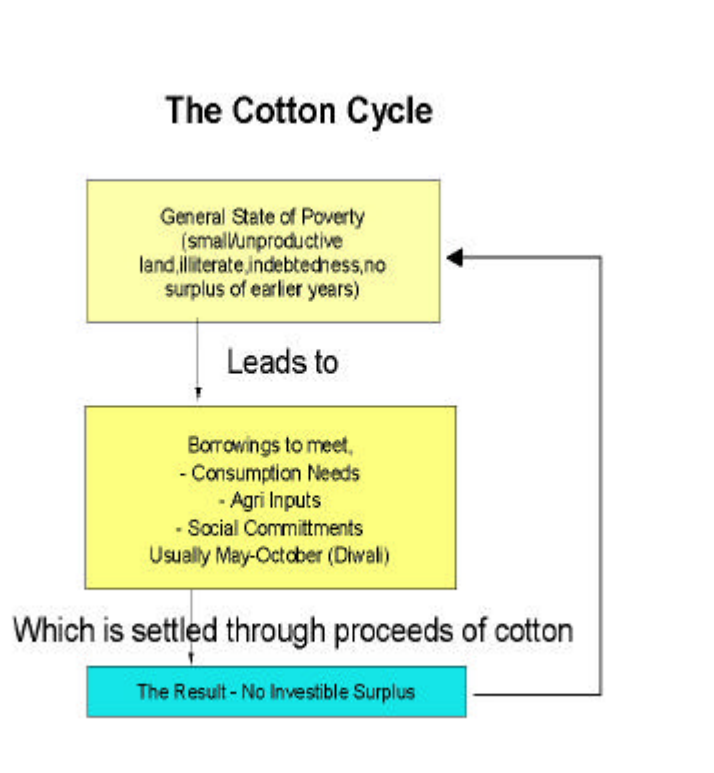
Wage Employment: the tribal groups/well unit members whom I met are first generation “farmers” in the sense that almost all of them received their land in the last 15-20 years or so. Prior to that they were attached to a large *ijardar* family on annual salary basis. Both the husband and wife used to work in the fields of landlords. Even now the practice is still on. Locally this arrangement is called *Gadi*. A *Gadi* is employed with a rich farmer on annual contract and he is usually paid Rs. 15,000 plus food grains. The cash value of food grain is about Rs. 3,000. The region also has rich forest cover and therefore there are forest related jobs that are available through the Jungle Kamgar Society for 6-7 months beginning October. As per the government policy all forest related work will have to be routed through the society and only tribals can be members of the society. All the tribals are members of the respective society in their village. The day’s earnings are quite good and are in the region of Rs. 60 per day. During the tendu patta season almost

every body in the village, except old people and toddlers work for collection tendu patta leaves. A family of four manages to earn about Rs. 1,500-2,000 in 15 days.

The zari block of Yavatmal neighbors Andhra Pradesh and there is a strong influence of traders and farmers from across the state on the region. Increasingly one notices tribal farmers letting out their field to the migrants from AP and their preference for wage labour instead.

### Changes in Cropping Pattern:

For many a farmer the cropping pattern has virtually remained same over the last two decades. It has always been cotton, tur and Jowar. Few ventured into vegetables or horticulture. Wheat and Soyabean is a recent phenomenon. The latter becoming popular because of the uncertainties associated with cotton.



The above exhibit shows what may be called as the cotton cycle. Since the tribals are poor and have no surplus of earlier years. They have to depend heavily on credit to meet their consumption and working capital needs. In such a scenario they are forced to buy inputs that are recommended by the shopkeeper, which is often inferior but fetches the dealer highest margin. The result of which is low productivity and output. Which further deprives them of any income.

In the absence of any formal credit system the tribal farmer is forced to sell his produce to the dealer/private trader often at a discounted rate. Small farmers are not too enthused about selling at government depot (APMC) because of high transaction costs and payment delays. The net realization in both the cases remains the same.

The net effect of this is the lack of any investible surplus at the end of a season. So there is no way he can contribute his share towards digging a well.

#### Regional Variations:

The following table provides the details of cropping pattern and irrigation during last year. If we compare the tribal farmers in two regions it is seen that,

- o Greater crop diversity is observed in Wardha as compared to Yavatmal
- o Farmers in Wardha have been replacing the area under cotton by soyabean. Soyabean is yet to be introduced among the Yavatmal Tribal farmers
- o 67 per cent of irrigation is provided for Rabi and other summer crops in Wardha as against 25 percent in Yavatmal

Small Units: Area Irrigated and Crops Taken during 2001-02

	Wardha Region					Yavatmal Region				
	Total Area	Area Irrigated	% Area	No of Hours Irrigation	%	Total Area	Area Irrigated	% Area	No of Hours Irrigation	%
Cotton/Tur		75	52%	659	31%	61	65%	883	75%	
Jowar		3	2%	0	0%	10	11%	1	0%	
Soyabean		17	12%	60	3%	0	0%	0	0%	
Wheat		29	20%	913	43%	17	18%	298	25%	
Gram		10	7%	144	7%	0	0%	0	0%	
Paddy		1	1%	96	5%	2	2%	0	0%	
Ground Nut		4	3%	56	3%	0	0%	0	0%	
Orange		2	1%	40	2%	0	0%	0	0%	
Vegetable		2	1%	148	7%	4	4%	0	0%	
Total	216	143	1	2116	1	226	94	1	1182	1

#### Demand and Supply Side Factors related to Tribal Society as related to Irrigation

The tribal communities have been quick learners and seem to have adapted to modern agriculture practices. Exposure visits and demonstrations have had a major impact. But to effectively convert this awareness and desire into demand for irrigation there are two primary concerns. There are Credit Availability for Investments and Electricity/Energy availability.

Increasingly one has reason to believe that credit availability as one of the major impediments in the demand for water for agriculture. This is due to several reasons<sup>3</sup>

#### Credit Availability:

- In the past several wells schemes have been implemented by the government agencies. In reality many of these wells remain on paper only but as per official

<sup>3</sup> The findings are based on the discussions with the local banker, NGO working in the region and tribals

records the land is classified as irrigated and hence no additional loan or subsidy will be available for the farmer

- ❑ Almost every single tribal family has been the recipient of some form of loan under IRDP or other schemes, which has not been paid in a majority of cases. The bankers these days have stricter norms and have blacklisted the entire family.
- ❑ The lack of investible surplus as per the cotton cycle
- ❑ There are limitations to extending micro finance for supporting areas such as Agriculture. The small size of loans and the extremely high rates of interest would make any such proposal non viable.

#### Energizing the Wells:

- ❑ The terrain and village locations makes it expensive for electric companies to reach out far flung villages.
- ❑ It is expected that the current power shortage in Maharashtra would last for another 3-4 years. Already in rural areas most of the villages are forced to go without power for 6-8 hours a day and it's worse during summers. And therefore even when water is there the same can not be used to its potential.
- ❑ Given the economics, providing electricity in rural areas is a losing proposition for most electric companies. The high cost of laying cables and other infrastructure, electricity theft, staffing and recovery of bills, political interference in user charges fixation and recoveries are issues that are likely to discourage any major investments in future. In the past the government support (even though for purely political reasons) at least ensured that electricity reached villages. The changed economic scenario one has to see if the board will accord priority to "non paying" rural sector versus "paying" urban areas.

Realizing these difficulties Assefa tried to adopt a supply based approach. It was expected that once the tribals have been provided with all the necessary inputs such as pair of bullock, well, seed, fertilizer and credit to a select group of farmers others would tend to be followers and thus the effect could be spread to larger section of the population. In reality not every one in the village could be made a beneficiary

The approach too was welfare oriented and the real poor farmers often lamented the fact that few chosen farmers have got all the benefits and if Assefa provides us with similar help they will also take up irrigation. The others who were supposed to be followers preferred to wait for their turn.

Mr. Mankar agrees and says " there have been several learning's for us in the past decade in implementing programmes in tribal dominated areas. It took almost a year for us to establish contact with the villagers. The first ones to come forward represented *the opportunists*, the second ones were *the followers*, and the finally the third residual group that had no voice was that of the people who really needed help". The field worker is under pressure to demonstrate his ability to commence activity there is a tendency to associate with the first group and by the time one reaches the real needy people, the funding stops and so does the programme".

## Section 5

This section presents the summary of the learning's from the two cases discussed in earlier section. These are based on the discussion the case writer had with the beneficiaries, the NGO officials and other learned people in the villages visited in connection with the case study.

What has worked?

1. Implementing a community-based initiative is a challenge in itself. There are complex issues involved. To begin with each of the tribal society is unique even though they technically belong to same ethnic group. The kolams of Pandharkavda in Yavatmal have different value system and culture as compared to their counterparts in northern Wardha. The insistence of Assefa/Gsst in taking up development only through the involvement of Gram Sabha was unique. It was quite close to the practices in tribal areas (Panch Committee) and therefore acceptability of decisions was key.
2. The insistence of Assefa on implementing schemes only at paces where the farmer first agrees for contour bunding of his farm and also adoption of other water conservation methods has helped farmers improve their yields.
3. Demonstration and Exposure visit particularly to western Maharashtra has made a significant difference to many a farmer with whom the case writer interacted with during the course of field visits. It would appear strange but few from the villages (the largest comprised of 40 houses) have even visited taluka places in their life. For them their community, village and the forest is every thing. In such cases the exposure tours that were organized by Assefa were helpful. Narayan Uikey of Enidorka, Manik Shirbhate of Khairy Krishnapur and many others have successfully taken to commercial agriculture after visiting their counterparts in western Maharashtra. Of course the success rate is also a factor of water availability and all these farmers have access to wells that have adequate water even in peak summer, which permits flood irrigation.
4. The efforts at crop diversification and water/irrigation availability seem to have worked as is reflected in increased area under Rabi season in the Wardha region. The Yavatmal schemes were fully completed in 2000-01 only and hence the changes in the cropping pattern are not yet visible.

What did not?

Supply Based Approach: It was believed that the once the infrastructure was created the tribals would take to agriculture by following their counterparts from the non tribal community. But in reality it would appear that this has not worked. There have been a few cases where people have taken to agriculture in a big way. As Narayan Uikey, a tribal farmer from Enidorka village puts it "the difference lies not in having access to infrastructure but a desire from within to change and this is a cultural issue. It is related with the upbringing of a person." His opinion is supported by Narayan Shinde of the same village, who belongs to the Kunbi community, he says "the real difference is in the amount of hard work that a person has to put in. Even though kunbis too are classified as

“backwards” there are no special schemes and therefore they have to fight to survive. As against this a tribal can virtually live off charity for the rest of his life because of the plethora of schemes that exist and more so in a state like Maharashtra where tribal pockets are few and scattered”.

1. Asset Ownership: The scheme’s uniqueness was in adopting a community approach to share resources. However people prefer to call these units as Assefa wells/schemes and therefore are permanently dependent (at least that is what it appears) on the NGO support which is unlikely. The author came across many instances where the unit holders did not replace Rs.5/- electric fuse but waited for days for the NGO worker to arrive. All at the cost of standing crops which needed irrigation.
2. What happens when the donor support stops or the NGO withdraws - This is one more area that the sponsoring agency has to look into. Fortunately for Assefa the programme of community lift irrigation system was part of its larger programme on village development and therefore the NGO technically did not withdraw from the region and remained in touch with the community in some way or the other. But there was some turbulence and period of uncertainty for three years (1997-2000) when Assefa withdrew from the region. People believed that since Assefa had withdrawn there was no need to repay any kinds of loan what so ever. These included loans that were advanced through the Gram Sabha and other CBO’s. This severely affected the cash flows to the gram sabha/well cooperative societies. This repayment of loan was supposed to build the corpus from where the maintenance expenses would be met.
3. It needs to be appreciated that wherever the schemes have not been successful (this is typically the case where there is only one user at the end of a period) the reason is not the inherent dishonesty of the person involved. Many of the schemes are now only a single user unit. Given the state of abject poverty in these areas some of the partners just do not have any money that they could contribute towards meeting the bill. In such cases they simply withdraw from the scheme. In the coming season they do not feel it morally right to take water
4. Beneficiary selection is a complex process. Especially when it comes to community initiatives. There were two choices before Assefa one was to have a homogenous group which was essentially a group of brothers belonging to a single family or a heterogeneous group that had members who were not directly related. In many of the cases the compulsions of the field resulted in people from a single family being clubbed as a unit and in spite of the agreements on water sharing and transfer of assets, in reality the well remained the property of the elder son and upon division of family assets 10 years later the well became the property of elder son. The younger siblings have no choice but to accept the reality.
5. It was expected that the tribal families would take to agriculture during the Rabi season as well. At many places it was found that only one of the unit member was using the water, the rest had given their land on rent to outsiders and preferred wage employment. The terms of tenancy agreement are quite favourable when one compares the expected gain that would result from additional yield in cotton or wheat.

6. It would appear that the Mahadapur scheme did not work because of leadership crises. It is a challenge before the organization that should it promote a savvy and educated person as leader in place of someone who is illiterate and a commoner but has significant following.
7. Saneity of MOUs and Agreements: Can an NGO really enforce the agreement? As a standard practice in all the cases the person in whose field the well was situated “technically” donated the land area adjoining the well to Assefa by way of a gift deed. In spite of this transfer of legal ownership the farmer remains the sole occupant and enjoys absolute ownership of the well, a fact well recognized by the other farmers. The sponsoring NGO too on its part agrees that the MoU was there to act as a moral check and its enforceability was always suspect.

*Apart from the above there are several other pertinent issues that need to be addressed or looked into. These are mentioned in the following paragraphs,*

A project will be often complete and successful if it has less external dependencies. Energizing the wells remains a tricky issue. There have been several cases of inordinate delay in sanction of electric power. In many cases even after a decade power has not been sanctioned. While it would not be prudent to discuss issues such as corruption at this point as it is an inevitable fact, recent reports in the press suggest that perhaps the decision to energize wells depends on the state government policy and that this year the state board has decided to energize about 24,000 pumps in 11 districts in the Vidarbha region. The share of tribal regions in this process is not known. One has reason to believe that a majority of these would be wells belonging to well off people who are adequately represented. The low representation of tribals in politics and administration reduces their bargaining capacity. This effectively reduces the chance of getting a connection in the near future as the officials are bound by the dictates of the government.

A second related issue then is the investment. The cost of well and related infrastructure for a 40 ft deep well is close to Rs 125,000. Although government subsidies for poor and tribal's are available these are on reimbursement basis, which means the cost has to be borne by the farmer and he is supposed to submit the bills to the irrigation department. This is simply not possible.

The existing land holding and cropping pattern too discourages any major investments in wells and therefore people in general are not too enthusiastic about well irrigation. Although they will not mind a well in their field if an outside agency sinks the same at its own expense.

Complexity of system design: In designing and implementation of the project multiple agencies were involved. These were the banker, NGO, government (the KT Weir belonged to the irrigation department) etc. As per the scheme design the money was advanced by Assefa to the Society with an implicit understanding that it would not be treated as a grant but a loan and therefore all the members will have to repay the loan to the society and not the provider. From Assefa's point of view the scheme of repayment to the society was based on the premise that the accumulated fund would provide the much needed capital support to the society to meet future costs. In case of smaller schemes the loan was advanced through the Gram Sabha. The beneficiaries however had

reservations about repayment and often it took form in the shape in the form of a question that if the NGO itself received the money as grant meant for us then how can they ask for repayment? These apprehensions were often supported and encouraged by other in the village who had a vested interest in the scheme's failure.

Suitability of insistence on cash crops such as vegetables that have high cost of cultivation, low margins and no local market in the tribal region. Many of the villages visited by the case writer remain cutoff for atleast three months in a year. There are no approach roads and means of transport that are available. For an average farmer a journey to the nearby taluka place located just 25 Kms away costs him a day's wage, something, which he cannot afford. The journey is time consuming too and involves inordinate wait for bus or jeeps. Food Grains such as Jowar receive preference over any other crop in the region. It ensures food security for the family. It is easily traded and can be sold as and when the need arises. Even small quantities such as 5 Kgs can be sold at a time. It can be exchanged with other needs such as meat or vegetables. As a matter of fact the tribal farmers in this region and elsewhere<sup>4</sup> have their own reservations about vegetable cultivation. Limited markets, Bad Debts, Infrastructure problems, degree of risk and most importantly their own food habits are often cited as reasons why they do not grow vegetables on a large scale.

According to Ayya Paiku of Ambejhari "lack of irrigation sources, motorable roads and expensive transport system makes vegetable cultivation non-remunerative. I once took about 2 mounds (20 Kgs) of tomato to pandharkavda, located at a distance of about 18 Kms from my village palgaon. It took me about an hour to reach the main road where I had to take a jeep that involved waiting for 30 minutes. It took me another 45 minutes to reach the market place. After spending over two hours in transit and spending about Rs. 10/- I reached the pandharkavda market. It was half past nine and all the deals for the day were done. Disappointed I approached one broker who agreed to pay Rs. 15/- for my produce. Left with no choice I took the money and returned. I have never again attempted to take vegetables thereafter".

Instead farmers have found growing wheat and pulses a better alternative to traditional cash crops.

Societal pressures - Meeting drinking water needs of the village is the first priority and in months where the water table goes down significantly the village has a right to draw the water first and only then can it be used for irrigation.

Impact of change in the generation - although everyone whom the case writer met emphatically stated that the younger generation was also keen on taking up agriculture, the youngsters were not present on the scene. Among the backward classes, the tribals enjoy a better status as they have been the beneficiaries of the ashram schools and hostels run by multiple agencies both government and non government and therefore it is no surprise that many of them aspire for white collar jobs instead of agriculture. Looking at

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<sup>4</sup> Villages around Limkheda, Dahod and Rangpur Ashram, Baroda in connection with a separate study on impact of micro irrigation kits

the population and the benefit schemes that have been announced the balance appears to be favourable. Many of the youngsters aspire to own a jeep or an auto or a shop as against working in the field. This is one issue which can not be ignored.

**Water Pricing:** There was no stated basis for charging the users of water. The stress was only on meeting the operational expenses. An important component of cost depreciation was not included in the cost estimates.

### Summary and Conclusions:

The study was undertaken in a non-evaluative method. It was conducted more with a view to understand the processes and develop an appreciation for the initiatives that some of the visionaries have taken decades ago and this has been the consistent approach which has been followed throughout.

The study aimed at looking two issues. The first being the experiences of tribal community in taking up agriculture and second whether the time gap in access to water has had any impact of the livelihoods of people.

Traditionally these tribal families were attached to *Ijardars* (akin to Jamindars elsewhere) on salary basis. A few of them mainly the chiefs owned land a majority of the people received land after the government ordinance on land ceiling. Only the land that was unproductive, had no source of irrigation was surrendered and transferred to the tribals. This effectively ruled out any significant shift in occupations. Agriculture for Kolams and Gonds was not new and therefore they were aware of the techniques and ways of cultivation. Culturally however they were different and this is an important issue. The community is closely knit in small hamlets and all decisions are public. An individual member dare not go against the wishes of the panch community for he would be severely reprimanded for doing so. This I would imagine has effectively prevented the tribals from being part of the main stream and therefore they have consciously chosen to remain at the periphery of the society at large.

My interactions with the farmers on the second issue suggest that water availability has had a limited impact on the livelihoods. This is for two reasons the chief being almost all of them grow Cotton as their main cash crop. Traditionally it is believed that cotton does not require irrigation. The presence or absence of water does not make much of a difference to the crop and therefore if a farmer has water he will irrigate cotton otherwise not. The yield differences and associated cost savings are not significant. The second is the opportunities in a protected wage market. The Jungle Kamgar Societies provide assured work to these tribals from October to May for atleast 15 days a month and it is not uncommon to see the whole village migrating to forests for wood collection, tree felling etc. People from other communities are not allowed to venture into this area. This season also coincides with the rabi season and therefore people have a choice. Food security is already assured by Jowar and tur and therefore cash wages are an attractive option.

### What is needed?

For a complex issue such as livelihood enhancement of the tribals there cannot be one sure way of method, which can be universally applied. Even when we look at water as one of the intervening area there are several ways in which one can go about. On one hand is a supply based approach such as digging up more wells and make water available so that people would tend to follow the more water better crops pattern and will soon catch up with the others in the community. But it is an expensive process. Water is but one of the intervening variables and in reality as far as livelihoods is concerned the tribal has more choice than what we have. This is something that has to be factored in.

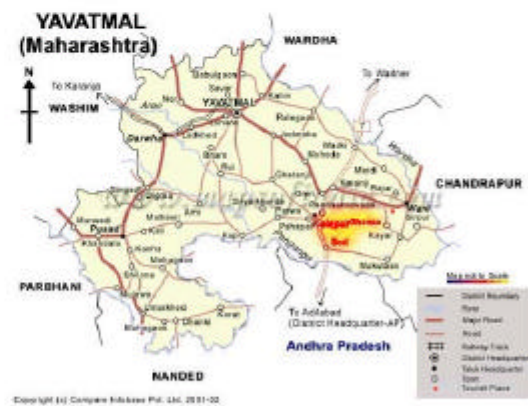
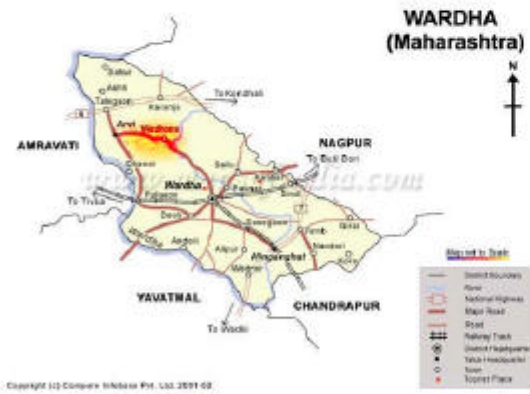
Another pertinent issue is that of donor flexibility. In many of the schemes that the case writer studied there is severe water shortage. The undulating land and the drains make it difficult for ground water recharge and therefore inspite of the infrastructure being present the same remains unused. Most of the programmes of this type are donor funded and therefore are based on projections that are made on some basis, which is usually the level of understanding of the issues, by a NGO. In the present case there was a strong argument for taking up some additional work related to water recharge and soil conservation that would have helped the unit members but the request was refused by the concerned donor agency as it would be outside the "line item". As a result of which the scheme design and its implementation suffers from inherent rigidities that makes *it target oriented rather than purpose oriented*.

Do micro watersheds better address the question of demand? The case writers interaction at Rajani where Assefa/Gsst has implemented a watershed development programme and also a community lift irrigation programme seem to suggest so. After completion of the watershed programme there has been perceptible increase in ground water (a fact corroborated by independent agencies) as a result of which fodder availability is better and many villagers are considering dairying as an option to supplement their income. Many of the farmers have also invested in sinking bore wells to draw water. The drinking water problem of the village has also been addressed.

## Annexure List

1. Map Showing Location of Project Villages
2. About Gond and Kolam Tribe
3. The schemes at a glance
4. The Questionnaire used for collecting information from beneficiaries
5. Case 1 - Assefa Community Lift Irrigation Project, Wardha, Maharashtra
6. Case 2 - Jawahar Adivasi Ursa Jalsinchan Sahakari Sanstha Ltd. Mahadapur, Tal. Karanja, Wardha (Jawahar Adivasi Cooperative Lift Irrigation Society Ltd.)

Study of Community Lift Irrigation Schemes in Wardha and Yavatmal Districts of Maharashtra



### The Gonds:

The Gonds are the second largest tribe in the country and are believed to belong to the Dravidian stock. The Gonds are concentrated in the central region popularly known as Gondwana, which includes the Satpura Plateau, a portion of Nagpur Plains and the Narmada valley. In Maharashtra, Chandrapur and Yavatmal districts have significant Gond population. In Chattisgarh, Bastar and Bilaspur have significant population of the Gonds. A section of the tribe was also known as Raj Gond. The kingdom of Gonds once spread over old CP& Berar Province.

The Gonds are divided into exogamous septs and clans. They do not marry in their own sept. The literacy rate among the Gonds, as per the 1971 census was 9.20 %. Due to prevailing low levels of literacy representation of the Gonds in Government and Semi-Government services is quite low. They generally speak *Gondi* language, which belongs to the Dravidian family of languages and is considered to be closer to Tamil. They have their own religion but during the British days many of them were converted to Christianity.

The Gonds depend on agro-forest economy. Historically food gathering was considered as their main occupation and source of livelihood. However, these days many depend on agriculture. As per the 1971 census, 64% of them were cultivators and 32% were agricultural labourers. Individual right of ownership over land is recognized among almost all the Gonds practicing settled cultivation. The traditional panchayats among the Gonds still exercise lot of influence and many social, economic and petty crimes are settled by them.

In the past the absence of a viable and alternative credit facility, a large number of Gond families were indebted to moneylenders, who eventually divested them of the ownership of their land.

### The Schemes at a Glance

	Assefa Community Lift Irrigation Project, Wardha, Maharashtra	Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha Ltd. Mahadapur, Tal. Karanja, Wardha	
	Zari- Yavtmal and Arvi-Wardha Blocks	Kolhapur Weir Type	Patalganga Scheme
Project Start	1989		
Project Completion	2001		
# of Units Planned	63	1	1
# of Units Commissioned	51 <sup>5</sup> (28 in 2002)	1	1
Command Area-Ha	242	19	7
Beneficiaries:	135		
Gond	47	-	-
Kolam	30	19	7
OBC	58	-	-
Users – Proposed	88	19	7
Actual Today 2002	51	7	4
Command Area – Proposed	169	20	14
Actual in 2002	95	12	10
Investments			
Avg. Well Size (ft)	22 X 30	Na	33 X 40
Avg. Well Depth (ft)	30	Na	40
# of Wells		Na	1
Water Availability-	<u>28 Units</u>		
12 Months	16	-	Yes
Kharip Season	12	Yes	
Rabi Season	12	Yes	
Total Cost Incurred (Rs.)	14,29,000	Nil	87,000
No of Mechanized Wells	28 Units		

<sup>5</sup> Of the 51 units implemented a decade later 23 are now part of urban area of Wardha and Sewgram and have been developed as residential plots. All figures and data are in respect of 28 units

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• Electric			
• Diesel Operated	25	1	1
	3	-	-
Classification of Mechanical Devices-Nos			
3 hp			
5 hp	15	-	-
7.5 hp	11	-	-
10 hp	2	-	1
	-	1	-
Cost of Motor Pump – Rs.	255700 (28 Units)	20,000	25,000
Pipeline (length- mts)		1,400	690
Pipeline Type		PVC	PVC
Pipeline Cost – Rs.		165,000	55,200
Cropping Changes			
Earlier	Desi Varieties of Cotton, Jowar		
Which is Changed to,	Hybrid and Early Growing varieties of Jowar, Cotton, Tur		
New Additions	Wheat, Gram and Soyabean		

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### Questionnaire for Collecting Information

Name

Age

Village Name

Family Size

Male-A  
Male-C  
Female -A  
Female -C

Member of (specify the group)

Land Holding

Plot (s)

1                      2                      3

Area(Acres)

Year of Acquisition

Analysis of Impact of water on wages, employment etc.

Attributes/Year ----->

Before                      After

Cropping Pattern

Wage Employment

Migration

Role of women

Environment

Children

Community Organization

Land Holding

Asset/Wealth Creation

Access to Credit

#### **Changes in Cropping Pattern**

Before Water

Crops Taken

Year Introduced



**Environment**

Changes in land quality

Forest Cover

Animal Fodder

**Children**

Health

Education

Grooming

**Asset/Wealth Creation**

Increase in family assets/wealth

**Access to Credit - Role of**

Bank

Cooperative Credit Society

Money Lender

Supplier of Inputs

Other Informal sources

## **Case 1.**

### **Assefa Community Lift Irrigation Project, Wardha, Maharashtra**

Association of Sarwa Sewa Farms (Assefa) started as an experiment in collective farming on a neglected bhoodan lands and evolved over the years into a holistic people's movement that reaches over 2500 villages in six states<sup>6</sup>. The Maharashtra operations were started in 1979 with the establishment of training centre at Dattapur, Wardha for Bhoodan workers. Initially the work of Sarwa Sewa Farm was limited to bhoodan allottees subsequently with the objective of holistic development of the village community it was decided that the organization would work for all the people in the village. The work in Maharashtra started in 152 villages in Wardha and Yavatmal. In selecting the villages care was taken to ensure that Assefa reaches out to villages that are far off in the interiors and lack even basic amenities. In many cases these were hamlets of about 15-20 houses where the government machinery would take considerable time to start any development activity.

### **Background**

The districts of Wardha and Yavatmal are located in the eastern part of Maharashtra commonly referred to as Vidarbha. The work area of Assefa Maharashtra was concentrated in the Painganga and Wardha river valley. The eastern part Yavatmal is known for its rich forest cover and this is also the region where there is significant tribal population. In Wardha district as one moves north there are pockets of tribal population. There is some forest cover in Aarvi and Karanja Taluka of Wardha and most of the tribals are located in these villages. The rest of the region's economy is cotton driven. Other cash crops such as Banana and Sugarcane are mostly grown in villages through which the Wardha river flows. Orange orchards are few and are mostly in the north Wardha. As cotton is the dominant crop of the area, in the past there were no possibilities of taking rabi crops as irrigation facilities simply did not exist..

The region receives good rainfall of about 900 mm per annum. The undulating structure of the land however makes it difficult to store water and ironically the districts face water shortage during summers. The state has created necessary infrastructure by way of small irrigation projects that have a command of 200 hectares or so.

In the absence of any large industrial base most of the people are dependent on agriculture. Alternate employment opportunities exist in service sectors at the district place or in Nagpur the largest city nearby.

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<sup>1 6</sup>In 1997 Assefa decided to withdraw from the state of Maharashtra. Gram Swaraj Sewa Trust was set by Shri. S.P. Mankar to carry on the work initiated by Assefa.

## The Scheme

According to an internal assessment report in 1992-93, agriculture development accounted for almost 40 per cent of its operational budget. This was in line with the objective of Assefa to provide all round development in the agriculture sector as this was the only way the financial status of the community can be improved.

The scheme of community lift irrigation in almost all the cases was well based. The usual approach to the project was identification of a group of people who are willing to share water and provide them with necessary support through the village gram sabha. These efforts were supplemented by interventions in other areas such as input supply, land development and marketing assistance.

According to Mr. S.P. Mankar, Secretary of Gram Swaraj Sewa Trust, Wardha and Ex-State Project Coordinator of Assefa in Maharashtra “the stress of Assefa had always been on community. In planning and implementing any initiative community involvement is key and Gram Sabha is the mechanism through which these were to be implemented. For improving the financial condition of farmers it was necessary to intervene in the area of irrigation as without which there can be no concrete development in the rural areas. Here too Assefa provided the necessary support such as inputs such as seeds and fertilizers, wells, bullocks, farm implements, storage places, marketing support etc. We felt that the community method was the most cost effective method to the needs of the farmer. Since capital support was scarce, it was only when assets were shared that they could be used best. Then there were other associated benefits as well. Coming together of people was also likely to remove caste, class differences, generate empathy among the larger farmers for the downtrodden etc.”

To finance these initiatives Assefa insisted that any form of grant or loan would be given to the gram sabha only and that the members could obtain a loan from the gram sabha. This was done with a view to ensure sustainability of the gram sabha and through creation of a revolving fund.

According to Mr. Mankar “initially we held meetings of the gram sabha as had been our practice at all other places but the response was not forthcoming. People would attend meetings and also agree with what we had to offer and yet there was no commitment from their side. Later on we realized that the Kolams and Gonds have a separate “Panch Committee” headed by a Mahajan. We then started involving the mahajan and other member. “Unlike other communities where the “patil” is an imposing personality, the mahajan among kolams could be an ordinary looking person, some one whom we people from cities would not even bother to look at” says Sudhakar Kamble who works in Pandharkavda area of Yavatmal District.

“And yet this “non descript” person has absolute authority. No one normally undertakes a new activity unless the Mahajan is involved” says Sudhakar Kamble “There have been instances where people have withheld harvesting their crops only because of the Mahajan’s inability to pay for the feast and puja that must be performed before harvesting”.

Anandrao belonging to Gond community from Mahadapur differs and says “the system of panch has now become nonexistent now and no one believes in it. The erstwhile mahajans of the community do not command the same respect as they used to earlier. Earlier their command was the final word. Now people are educated and think

#### **Panch Committee of Kolams and Gonds**

A typical Panch Committee comprises of *Naik*, *Mahajan*, *Karbhari* and *Ghatya*. The committee members are elected every year on *Gudhipadwa* day which heralds beginning of a new year in Maharashtra. There are no “elections” but usually the existing members performance is reviewed and new members appointed if there is any need. The panch committee is the supreme decision making authority among the Kolams and Gonds. The committee is responsible for mediating in the almost all the areas that affect the community and includes marriages, separation and festivals. The *Mahajan* is akin to secretary to *Naik*, the chief. *Karbhari* is supposed to take care of procurement and supplies, *Ghatya* is the messenger cum tax collector who reports to *Mahajan*. *Mahajan* also maintains the accounts of all fines and contributions received and expenditure.

According to Kisan of Ambejhari “the system is most effective for regulating the members. Any one who does not honour the verdict of the panch is liable to be ousted from the village and no one would cooperate with him unless he himself expresses a desire to comeback to the mainfold. Decisions and punishment are announced in the same meetings and many a times the panch committee has spent days deliberating over a complex problem. During such times all the activities in the village come to a halt. The punishment is usually a monetary fine and a dinner, the cost of which is to borne by the person in default”.

“However, with changing times and as a result of our interactions with the outside world, there have been instances where people have dared challenge the authority of the panch committee and sought redressal elsewhere at great cost” laments Kisan “perhaps this is the cost of development we have to pay”.

individually. People behave the way they want to”.

After it was decided to implement the community lift irrigation programme a work contract was entered into between the concerned gram sabha and the labours who undertook the work. The contract agreement would specify the nature of work to be one as also the payment that is to be made. The contract term included cost of the material as well.

The well was inspected by a team of officers from Assefa for the work done and handed over to the beneficiaries. The beneficiaries had to enter into a Memorandum of Understanding (MoU) for sharing of water and maintenance costs. The MoU also

provides for action that would be taken in case any of the parties to the agreement fails to honour his word.

Although the terms of contract provides for sharing of maintenance of costs it seldom happens in reality. Tanba Sambha Soyam of village Palgaon says that “we have not yet received the bill for power usage this year. But I understand we have to pay Rs. 1200 pa. Whenever we receive the bill either one of us will have to pay the bill and he will recover from others. We have not worked out any other arrangements. They will pay us at the harvest stage”.

However Bhadu Chaudhari of Nimni differs and says that “our scheme was a success and the partners did benefit from it. However, when the electric bill for Rs. 1200 came no one was prepared to contribute and instead chose not to take water rather than contribute for the bill amount. I however did not agree with them and paid the bill. Others were jealous and even ridiculed me for paying the bills; some even went to the extent of throwing stones at the electric installations”.

Narayan Uikey of Maragsur says that “there is a general tendency among us to pull down a person. Every one agrees and is aware of the need to change and yet few actually do. I tried to change and people tried to create obstacles. They lacked in some areas. Some did not have access to credit, some had no access to knowledge and some were simply lazy”.

### **The Community Lift Irrigation Scheme**

Each well unit comprised of 2 to 4 beneficiaries who were identified based on things such as water availability, need and desire to participate in community initiative. The scheme was started in 1989-90 and till date work has been undertaken in 63 units and 50 have been completed in all respect. The first phase of the scheme was completed by Assefa around 1997 when 37 well units were completed. 16 new units were completed during 2000-01. 53 well units exist as of now. The composition of the beneficiaries remains mixed. Of the 135 beneficiaries of the scheme 47 belong to Gond Tribe and 30 belong to Kolam tribe. The rest of the beneficiaries are from other communities mostly kunbi's. The project was completed at a cost of Rs. 22.49 Lakh. Annex 1 provides the details of the investments made. Major investments were made in digging well (50 Nos at a cost of Rs. 1429.000) . Annex 1 provides the details of investment made.

Of the 50 well units, 6 have opted for diesel operated engines. “Diesel engine are expensive to operate but we have no option as there is no electricity to energise electric motor pumps says Mr. Mankar.

### **Working with smaller vs. larger groups**

The scheme envisaged popularization of the concept of participative community irrigation. In a majority of the cases the tribals received plots of lands under a government scheme said to be initiated after the then Indian prime minister Late Mrs. Indira Gandhi. Although each family was supposed to get about 4 acres of land many farmers took lands in the name of their family members.

There are two important considerations here one is choice of beneficiary and the second is the breaking away of the joint family system. Sudhakar Kamble admits “ Assefa was born out of the need to assist people who were not “agriculturists”. These were farmers who received their land under bhoodan and other schemes of the government. We provided the tribals with bullocks, seed, fertilizers, and even in some cases tried to assist in storage and sales. Welfare of the community was the primary consideration in all these cases. However people thought it was grant and therefore choose not to repay the loans we provided”.

The driving force behind Assefa is the Gram Sabha. All the loans granted by the kosh (an NBFC, sister concern of Assefa) are based on the recommendation of the gram sabha and the recoveries are credited to the revolving account of the gram sabha.

The second and the larger issue is that of the disintegration of families. According to Madhukar Bhang, ex project officer at Assefa “community schemes have a limited time span. The scheme works fine in the initial years but later on when issues such as succession, acquisition of additional land by the same farmers etc come up there is no answer. The community asset at best becomes the personal property of the person in whose field the well is situated and as happens he is also the one who has paid for the maintenance of the well and electric charges”.

Lack of education agriculture background makes them perfect candidate for early marriage. It is not uncommon to see young boys and girls of 16-18 years who are married. A typical habitat consists of just a large room and a verandah and therefore the young couple invariably prefers to stay in a separate house. The demand for division of land follows next. “This is unlike other communities such as Kunbis” says Thakre”. Thakre himself belongs to the kunbi community and is an agriculturist. In our community he says “even when children separate on account of taking up employment elsewhere the land usually remains with one of the bothers who cultivates and shares the income”. Ayya Paiku, 50 of Ambejhari concurs and says “ I had 45 acres of land which I had painstakingly acquired over the years but the same is now divided among my three sons who form one such unit where the scheme was implemented

## **Infrastructure Created**

### **Water Sharing**

According to Bhadu Chaudhari of Nimni "this is the only well where water is available through out the year and hence people in the village insist that the same be made available to villagers during summer for drinking water purpose".

According to Tanba Sambha Soyam of Palgaon "The arrangement for water sharing is based on turn. It takes about 10 hrs of watering for irrigating one acre of water. The turn depends on water recharge in the wells. It takes about 3-4 days to recharge the well. If we had adequate water then there would be no problem. Availability of electricity is also an issue. If there is no electricity then no irrigation".

"If all us have water source then people would be encouraged to take up irrigated agriculture. We have a spirit of competition in the village. We even go to the extent of hiring motor. Last year one of the farmers took water from the nullah located at a distance of over a kilometer using a network of pipes. I have however not given water to any one. The rental arrangement is preferable to ownership as he is not bothered about capital investment and other costs. The charges too are payable on harvest. If it rains well then there would be no problem year round. It rains very good in monsoon" he says

Kisanrao of Palgaon says "there is one nullah adjoining my field the water remains upto Diwali / Holi. This is due to the dam upstream".

On the issue of individual vs. community wells, Kisanrao of Pangaon says "individual wells are better than community owned wells. Although they are expensive to construct, in the long run the returns justify the investment. In case of joint ownerships disputes are not uncommon. In such cases the other party simply refuses to share the costs and also the water. The agreement is there but that's only a formality. People say yes initially but change later on. The whole issue is of water availability if there is abundant water then there is no problem but if there is shortage of water then disputes are inevitable."

Lakshman Sitaram Dhurve and Maroti Sambha Kumare share a well at Rajani. Unit No 3. According to Maroti "the well was dug in 1990 and the project was completed in 2000. The expenses for the installation were paid by Assefa. Since there is no electricity, we have to rely on oil engine that costs Rs. 100 Per day. I did not use the water last season as there was no engine available" However, Lakshman says "I used it last season and spent 3000 on hire".

Narayan Rao Uikey of Maragsur, Wardha says "I have well is located in the valley portion and therefore there are natural springs that recharge the well in a relatively short period of time. I have a three HP electric pump through which I irrigate my 2.5 acres and also provide water to my neighbors. Although there is no formal charge as such but people do offer me the equivalent of the cost of the diesel that would be needed to run an oil engine for the whole day".

According to Vithoba Shadmaka "From our group only the Shadmaka's take water from the well and the expenses and maintenance are shared by us. The other two members take water from elsewhere. Some of us did attempt at taking vegetables last season but the water did not last".

According to Gangaram Mahadeorao Godhange, Yenidorka, Wardha Dist "I told saheb that "I have limited quantum of water in my well. As such I have no objection to sharing water with other's but it should not be at the cost of my own needs. If I have surplus water then I do not mind sharing the same. As there is no water the question of sharing does not arise. I manage to irrigate wheat that I take after soyaben and manage to save oranges".

### **Cropping Pattern Changes**

Cotton is the main cash crop of the region. The kharip cropping pattern remains equally divided between cotton and sorghum. Over the years there has not been any significant change in the cropping pattern so to say. Few people if at all take vegetables. One major change in the cropping pattern as noticed over the years has been the gradual reduction in the land under cotton. The land thus released is used for sorghum which is followed by wheat.

Cotton has been the traditional crop of the region. For some one like Bapurao Subha Atram of Nimni “there is no alternative to cotton. Even in worst conditions it can give about 2-3 quintals for an acre and if irrigation is provided it yields another 2-3 quintal on the same area.”

The objective of the scheme was to encourage farmers to take a second crop during the rabi season. As the region receives good amount of rainfall and there is adequate moisture in the soil it is possible to take wheat or gram in rabi season.

According to Ayya Paiku of Ambejhari "lack of irrigation sources, motorable roads and expensive transport system makes vegetable cultivation unremunerative. I once took about 2 mounds (20 Kgs) of tomato to pandharkavda, located at a distance of about 18 Kms from my village palgaon. It took me about an hour to reach the main road where I had to take a jeep that involved waiting for 30 minutes. It took me another 45 minutes to reach the market place. After spending over two hours in transit and spending about Rs. 10/- I reached the pandharkavda market. It was half past nine and all the deals for the day were done. Disappointed I approached one broker who agreed to pay Rs. 15/- for my produce. Left with no choice I took the money and returned. I have never again attempted to take vegetables thereafter”.

### **The trends one notices**

Sudhakar Kamble says that jowar, poultry and goat are some of the preferred options before people for all of these can be stored and therefore do not involve distress selling and second there is a ready market that offers cash. A family can take about 30 Kgs of jowar to the market and make a week's purchases using the proceeds.”

Narayan Rao Uikey of Maragsur, Wardha says "Agriculture was rainfed and not much attention was paid to it. Forest still is an important source of livelihood for most of us. All the villagers are members of the Jungle Kamgar Society in the village that undertakes contracts for felling trees in the forest. People manage to find work for almost four to five months in a year. We manage to get about 100 days work in the seven month period. The days wages too are good and are in the region of Rs. 50-60/- a day. In addition there is bonus payment. About 20 days in May the entire village is engaged in tendu patta leaves collection and an average family manages to earn about Rs. 2000/-. In cases where a farmer has access to water some of the members stay back in the village while rest go to forest.

### **Tribals - laid back?**

“Most of the tribals prefer not to take any initiative. There is no need to. Their needs are limited. Even with jowar, chilly and salt they can survive. The flood of schemes and grants that they are entitled to makes them a perfect candidate to sit back and enjoy all the benefits says Thakre one of the field workers at GSST.

However Kamble has a different story to tell. “GSST is implementing a watershed programme at Rampur where these tribals are employed. One of the days a labourer happened to see a wild pig. He shouted and immediately the whole village came to life with scores of men chasing the wild pig. They were simply not concerned with leaving the work midway or losing a day's wage. What mattered was the kill which would be their dinner for the day.” “The tribals as a society are fond of hunting and spend at least one day in a week for hunting for animals” says Nayaran Uikey

Bhadu Chaudhari, Govari, illiterate, Nimni says “my father never took interest in agriculture. I used to work as a farm labour. Govari's were all working as farm labourers. We got the land about 20 years ago under a government scheme. Even my partners are the same. With the irrigation facility I requested my partners to cultivate wheat but did not succeed. My partners prefer the fixed income of rent from the field as against cultivation”.

Narayan Uikey says “I have only 2.5 acre of land and still manage to earn more than others in the village who own more land. Adequate water is not the only thing that I have. I make extra efforts to contact people and get as much information as possible from all the possible sources. Agriculture is not only water but requires tremendous hardwork and there are people who earn a lakh of rupees from the same plot of land. They do not involve themselves fully. They lack initiative”.

Narayan Bapuraoji Shinde belongs to kunbi samaj says "tribals have a different approach towards farming. In our community farming is the main occupation and we have no other trade and therefore all our energy is focussed in maximizing the returns from a given piece of land that we own. We have limited land and therefore prefer crops of shorter duration cash crops such as vegetables. Earlier these people did not have any knowledge of farming. The use of fertilizers was limited to organic manure and that too was not simply dumped in the field. They were not aware of techniques and importance of ploughing, weeding and levelling of land. It is only now that they have started using chemical fertilizer that the yields have gone up. Agriculture was never their occupation. They used to own animals and sell cow dung. Each of these people used to have large herd of animals. Ever since they have shifted to agriculture the supply of good quality organic manure has reduced considerably forcing us to buy expensive chemical fertilizers”.

“As we do not get alternate employment during summer we spend most of our time in land preparation for the coming season. This year for example I deepened my well by about three feet. The better quality of land and increased water availability helped me increase cotton yield to six quintals for an acre. For a small farmer there is no substitute to hardwork. *Karni* and *Karm* are important for successful farming. The attitude of tribals towards agriculture differs from us. This is the main occupation for them for us and in the

absence of agriculture we have no option and so we try to maximize the return from agriculture. There are many farmers who own 50-60 acre of land but do not cultivate instead they prefer the rent income from the land. They merely cultivate 5-10 acre as would be sufficient to produce foodgrains for the family” he says.

### **Problems that they face**

“In many cases there was considerable delay in getting power. The delays on account of sanction of power makes it difficult for us to complete the project and reap the benefits. Even when all the formalities have been completed the board officials take considerable time in sanctioning power. This forces some of the famers to steal electricity. Sometimes this is done with the support of the lineman himself. Some money has to be paid to the lineman which the tribal feels is towards the bill for running the motor” says Sudhakar Kamble.

On behalf of her group of 11 farmers Mrs. Patobai Ragho Atram had submitted the application for expectric connection in 1988. A 11 member community lift irrigation scheme was planned for the farmers of Pardi and Katli borgaon villages in Pandharkavda, Yavatmal.. It was expected that with this initiative about 50 acres of land belonging to these tribal families would be irrigated. The scheme was also supposed to provide vital drinking water to these and other families in both the villages. A pipeleline of 1.5 Kms and an electric pump of 12.5 Hp was accordingly planned for in addition to a 30ft deep well. The group received a demand note for Rs. 560 for a 3 Hp motor connection. When we asked the electricity officials to explain th erationale behind this change we were simpy asked to submit fresh application instead says Sudhakar Kamble. A new application was therefore made in Dec 1989. The matter remained pending and after a year or so the officials asked the NGO to submit yet another application. This time addressed to the Asst. Engineer as the officials discovered that they did not have the sanctioning authority. In Feb 1992 there were some signs of activity and the junior engineer visited the field and asked the farmers to deposit Rs. 2935 being cost of 10 electric poles. The NGO project officer however pointed out that the location of well from the nearest distribution point would require atleast 15 poles and not 10 as suggested by the official. “Nevertheless we brought the poles from the godown to our fields on our own bullockcarts, the freight of which remains to be paid” said Kisan Ragho Atram. The demand of Rs. 2935 was paid by the NGO in April 1992. In the meanwhile the vilagers with the help of NGO gave representations to press, local MLA, officials of tribal development authority and scores of officials from MSEB but these were not acted upon Patobai died in 1992. Thereafter her son Kisan, one of the beneficiaries of the project followed up the matter with MSEB. “This change was notified to the board officials who promptly treated it as a new case”. It is more than a decade now. Inspite of repeated followups and submission of all “relevant papers”, electricity is yet to reach Kisan’s well. Husen Deve Kinnake says “if only we had paid Rs. 3000 demanded by the officer we would have got the line way back. But the NGO would not agree to it”

## The Future

The NGO approached the villages where it worked with a *yojna* (scheme). “In many cases the beneficiary groups were formed simply because failure to do so would mean that the *yojna* may not come to the village. None of the people wanted that they be held responsible for this crime” Kamble says.

According to Mr. Mankar “ there have been several learning’s for us in the past decade in implementing programmes in tribal dominated areas. It took almost a year for us to establish contact with the villagers. The first ones to come forward represented *the opportunists*, the second ones were *the followers*, and the finally the third residual group that had no voice was that of the people who really needed help”. The field worker is under pressure to demonstrate his ability to commence activity there is a tendency to associate with the first group and by the time one reaches the real needy people, the funding stops and so does the programme”.

“The second major issue is that of the ownership of the community assets that have been created. Even after a decade people still refer to the wells and other buildings as Assefa wells. The critical question is transfer of ownership not in physical terms but mentally the community must be willing to take over the responsibility and maintain the asset”

## **Case 2.**

### **Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha Ltd. Mahadapur, Tal. Karanja, Wardha (Jawahar Adivasi Cooperative Lift Irrigation Society Ltd.)**

On March 21, 1991 Ms. Kavita Gupta, Then Chief Officer, Zilla Parishad, Wardha planted a sapling of Mayflower tree at Mahadapur. A decade later the sapling has grown into a large tree and has been a mute witness to the rise and the fall of the Mahadapur. In many ways Mahadapur represented our idea of what a developed village should be like. There was a School, Water supply system, Dairy, Kitchen garden, Community Organizations such as Mahila Mandal, Cooperatives, Yuvak Mandal, Bal sanskar kendra, Innovations such as a solar operated telephone, a unique way of conserving waste water, community marriages etc. There were scores of high profile visits of officials from state and central government, films and exposure visits of people from different region. There was no place for individualism. Community was key. Whatever had to be done was done publicly and with the involvement of all. Every decision had the approval of the GramSabha.

The meeting of gram sabha on 3rd of September 2002 was held after a gap of nearly five years. The last meeting was held at the time of withdrawal of Assefa, the local NGO from the village. A spirit of melancholy prevailed all over as people avoided looking into each other's eyes in the same gram sabha building that they had built overnight through shramdan a decade ago. The village infrastructure and the assets that had been created need urgent repair. Chamduji in his 70s and others from the village stare at the walls that once adorned photographs of the hero's of our independence struggle. A steel almirah in the corner that bears the asset code number is the only evidence of Assefa, the Non Government Organization that spearheaded the change. The metal road that was supposed to connect the village with the highway has been diverted to the nearby village Danapur.

The primary school was the only place that had some signs of activity and that too came to life once the children saw the camera and for a change one could hear children reciting lessons in loud voices. Many school going children decided to return halfway and the primary school in the village closed early to enable children to attend to the visit of "officials" after a gap of three years. That was the only sign of life in the village that once claimed that it had no space for parking of official vehicles.

### **About Mahadapur**

Mahadapur is a small village of 40 households, 39 kms from Wardha in Maharashtra on the Wardha-Arvi state highway on the banks of Dham river. The villagers belong to Gond tribe. Traditionally, they used to work with the local ijardars or landlords for annual salary and used to look after their agriculture. When the land ceiling act was passed many of them received about 2-3 hectares of land. The agricultural practices though remained traditional until a decade ago. The village came in contact with Assefa that was working in the same block in the nearby villages in 1988. The work of Assefa started with the formation of the Gram Sabha and in the next three years there was a complete transformation of the village. Interventions in almost all the areas be it health, sanitation,

agriculture and finance were made by Assefa and by 1991 the village had become an *Adarsh Gaon* much before the idea was floated by the state government. There were scores of high profile visits of government officials and every one wanted to see the miracle that Mahadapur was. Annex 1 provides detailed profile of the village. Annex 2 provides details of the initiatives taken and projects implemented by Assefa.

#### *The Focus - Community or Individual*

According to Mr. S.P. Mankar, Secretary of Gram Swaraj Sewa Trust, Wardha and Ex-State Project Coordinator of Assefa in Maharashtra “the stress of Assefa had always been on community. In planning and implementing any initiative community involvement is key and Gram Sabha is the mechanism through which these were to be implemented. For improving the financial condition of farmers it was necessary to intervene in the area of irrigation as without which there can be no concrete development in the rural areas. Here too Assefa provided the necessary support such as seeds and fertilizers, wells, bullocks, farm implements, storage places, marketing support etc. We felt that the community method was the most cost effective method to the needs of the farmer. Since capital support was scarce, it was only when assets were shared that they could be used best. Then there were other associated benefits as well. Coming together of people was also likely to remove caste, class differences, generate empathy among the larger farmers for the downtrodden etc.”

To finance these initiatives Assefa insisted that any form of grant or loan should be given to the gram sabha only and that the members could obtain a loan from the gram sabha. This was done with a view to ensure sustainability of the gram sabha and through creation of a revolving fund.

One of the focus areas for Assefa was the improvement of financial condition of the people. The agriculture practice of the Gonds was primitive and was completely dependent on the vagaries of monsoon. In the absence of any irrigation facility Cotton was the major crop. The Gonds preferred wage employment and not much attention was paid to farming. According to Mankarji “our first aim was to ensure food security for these people and therefore cultivation of short duration hybrid jowar was encouraged. Thereafter we started looking out for ways in which the land that is released by jowar could be used. The Dham river would have water only till October and unless there was some other mechanism of providing support irrigation taking rabi crops was not feasible”.

“In 1989 the Government of Maharashtra had constructed a Kolhapur type dam on the Dham river about a kilometer from the village. The dam had the capacity of storing water for upto January and was meant for people who were located at a distance. We approached the officers and pleaded that the farmers who are from Mahadapur should be allowed to take the water as they are closest to the river. The officials saw the point and agreed provided a cooperative society be formed that would make the necessary investment and regulate water sharing among the farmers” he says.

The project document mentions that the overall goal of the project was to provide irrigation support for a minimum of one hectare of land in a period of five years, which will ensure improvement in financial status of the village.

### The Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha (Sanstha)

The Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha with an initial capital of Rs. 11000 (11 members each contributing Rs. 1000) was registered as a society on 2 September 1989. The first project of the Sanstha was a lift irrigation scheme on the Kolhapur Type Weir constructed by the government that would have a command of 12 hectares and benefit 12 people. In the second phase 7 new members were added to the scheme and the command area increased to 20 hectare. In the third phase a separate community well lift irrigation project called patalganga was proposed. The patalganga project benefited 7 farmers and had a command of 14 hectares.

Of the total project cost of Rs. 3.05 Lakh, Assefa contributed Rs.2.40 Lakh and the balance was raised as loan from the bank. A few farmers also got government subsidy amounting to Rs. 9,000. The beneficiaries contributed own labour. The entire project was completed at a cost of Rs. 3.71 Lakhs. "A similar project would cost anywhere between Rs. 5-6 lakhs if an outside agency would have implemented the scheme. The savings on costs directly helped reduce the loan liability of each member" Mr Mankar says..

It was agreed that each one would take only so much of crop as can be irrigated in 24 hours of continuous pump operation. This roughly translated into an acre of wheat or gram. Although this was the upper limit a farmer could irrigate more land if he is able to do so with in the allotted time.

The scheme document provided that the expenses on repairs, power and management charges will be shared equally by the farmers. The scheme also provided that the maintenance charges shall be recovered in advance by the farmers. The loan was recoverable in maximum ten annual installments by the society and it was at liberty to decide ways and means to recover loans from members.

The project was implemented in three phases.

### The Jawahar Adivasi Upsa Jal Sinchan Unit-I (KP Type)

The first phase of the scheme was called Kolhapur Type Scheme as it was a lift irrigation scheme on the Kolahpur Type Weir on Dham river. The 14 beneficiaries were marginal farmers and each one of them was the recipient of land under the government scheme. The project had a command area of 12 hectares. The scheme envisaged installation of a 10 hp electric pump and laying of 1000 mts of pipeline.

The total cost of the project was estimated at Rs. 130,000/- as under,

Particulars	Amount (Rs.)
Pump with accessories (10 Hp)	20,000
Provision for 1000 mts pipeline 140 mm diameter and 6 kg pressure	100,000
Pumpshed	5,000
Foundation for pump	5,000
	130,000

The project was completed in 1989 at a cost of Rs. 130,458/- in six months. Bank of India, Morangana sanctioned a loan of Rs. 79,541/-. The project received a subsidy of Rs.

43,825/-. The cash equivalent of people's contribution was Rs. 7,092/-. The Jawahar scheme envisaged that there would be a net addition of Rs. 71,250/- to the net income of the fourteen beneficiaries. The following table provides the details,

Crop	Area	Production (Qtls)			Rate per Qtl(Rs.)	Income (Rs.)		
		Now-Post project	Earlier	Net Addition		Gross	Expense	Net
Cotton	6	5	15	10	800	48,000	15,000	33,000
Jowar/Ground Nut	6	12.5	25	12.5	150	11,250	3,000	8,250
Wheat/Gram	6		25	25	300	45,000	15,000	30,000
	18	17.5	65	47.5		104,250	33,000	71,250

#### The Jawahar Adivasi Upsa Jal Sinchan Phase - II

Surface irrigation was the preferred method for irrigating the fields and therefore there was a proposal to include a few more farmers in the neighborhood who in any case were indirectly benefited by the excess water that would overflow into their fields.

In the second phase an additional amount of Rs. 45,000 was spent on providing 400 mts of pipeline and distribution chambers and valves. The actual expenditure incurred was Rs. 73,383/-. One of the beneficiaries Vishwanath Nago Linge was eligible for subsidy by the government and agreed that the subsidy amount be directly deposited with the sanstha and adjusted against his loan account. The net cost therefore came to Rs. 65,383/-. The bank did not fund this proposal and Assefa provided the entire amount through gram sabha. Phase II was completed in 1992.

#### The Patalganga Lift Irrigation Unit (Patalganga)

On the other side of the village there was yet another group that was agreeable to the idea of community irrigation and requested Assefa to support their group. The project was called patalganga as it was well based scheme.

Under the scheme an open well in the private agriculture land owned by one of the beneficiary was proposed to be dug. The well would be supported by a 7.5 HP electric motor pump and pipeline. The well was dug on the bank of the main stream at the confluence of two distributaries. The streams had been provided with feeding watershed management by Assefa and soil conservation department of the government. A 690-meter underground pipeline was also planned.

The total cost of the project was estimated as under,

Particulars	Amount (Rs.)
Well - 10 Mts Diameter and 12 Meters Deep	50,523
Pipeline - 140 mm Dia, 4 Kg Pressure, 690 Meters	55,200
Pump set and accessories	20,000
Pumpshed	5,000

Total	130,723
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The Patalganga project was completed in 1992 at a cost of Rs. 167,283/- in six months. The Bank of India, Morangana that had sanctioned the earlier loan did not support the proposal and the costs were met through a loan from Assefa. As had been the policy of Assefa the loan funds were to be repaid to the gram sabha.

The Patalganga scheme envisaged that there would be a net addition of Rs. 71000/- to the net income of the ten beneficiaries. The following table provides the details,

Crop	Area	Production (Qtls)			Rate per Qtl(Rs.)	Income (Rs.)		
		Now	Earlier	Net		Gross	Expense	Net
Cotton	4	7.5	2.5	5	800	32,000	10,000	22,000
Jowar	4	12.5	6.25	6.25	150	7,500	2,000	5,500
Wheat	4	10	-	10	300	24,000	10,000	14,000
Horticulture/Sericulture	2	2	-	-	20,000	40,000	10,000	30,000
	14	32	8.75	21.25		103,500	32,000	71,500

#### The Initial Days

According to Dadaro Shankarrao Kaurati, 35, a member of gram sabha, says “we became members of gram sabha by paying Rs. 1/-. We were asked as to what our problems were and promised to help us in solving our problems. We then contributed our own labour and worked hard in creating a dream village in three years flat. There used to be a community kitchen garden from where every one in the village could take vegetables, clothes were provided, people were given bullocks and pucca houses. There was not a single area that was left untouched by the NGO. We became an Adarsh village and scores of people started visiting us from far off places. I brought the wood that was needed for constructing this gram sabha house. Collectivism was the key. The NGO also helped us financially by providing crop loan and provided all sorts of help”.

#### Water Usage Pattern

According to Punjabrao the chairman of the sanstha “water from the KP dam is used from Pola<sup>7</sup> onwards upto Sankrant. Initially it is used to provide support irrigation to cotton thereafter it is used for wheat and gram. It all depends on the monsoon. During this period the pump operated 24 hours a day. Some overtime was allowed based on the state of electric supply”. The water during October and November is used to provide support irrigation to cotton and thereafter for wheat and gram. There was a general understanding that each one should restrict the land sown under wheat to 1 acre as it would ensure equitable distribution of water and also provide a much needed fod security to all the farmers.

#### The impact

According to Anandrao Kokade “the initial years were best and we took additional 100 qtls of wheat and 50 qtls of gram every year between 1989 to 1992”.According to

<sup>7</sup> From end September to March

Punjabrao “ the shift from Rabi Jowari to Hybrid Jowari has helped us overcome food shortages. Through irrigation it was now possible to take two crops and wheat was cultivated by all the farmers who had access to irrigation”.

According to Mankarji “as a result of support irrigation to cash crop such as cotton the yields have gone up to 3-4 quintals for an acre that was earlier about 1-2 quintal per acre. The rabi irrigation has also resulted in additional yield of 7 quintal of wheat for an acre of land and 4 quintal for an acre of land”. “In the recent past large farmers from nearby villages have installed pumps of higher capacity and draw water illegally from the reservoir for irrigating their fields. This makes it difficult for farmers of this village to take water for rabi crops. The internal disputes of the village have indirectly benefited the non members.” He says.

#### Sericulture and Cotton Procurement Schemes

Encouraged by the response two new activities were added. These were a project on sericulture and acquisition of green card for sale of cotton. Both these activities were part of the Patalganga project.

According to Mankarji “Mahadapur is located on undulating land and water shortage is always there. There was a need to go beyond agriculture and the government was promoting sericulture at that time very aggressively by offering subsidies and incentives. It was decided to take advantage of the government scheme of sericulture in the patalganga project. The necessary support was provided by the DRDA and KVIB, Wardha to the Mahila Mandal. The women were provided training by the district industries centre on sericulture and silk reeling. Each farmer from the Patalganga project contributed half an acre of land for the purpose. In the first season about 70-80 kgs of cocoon were taken, However, there was attack of pest and even the experts opined that much depends on natural conditions prevailing in the region. The entire crop was lost in the process. The villagers thought it was too risky and therefore were not in favour of starting again. The programme therefore had to be wound up after one year”.

The sanstha also acquired green card so that individual farmers need not sell their cotton to private traders at a loss. Instead all the cotton from the village was pooled and sold under a common name. “Those were the days when the cotton would go out in trucks and not in bullock cart as is the case these days” Bhimrao says.

The sanstha was responsible for collective procurement and sale of cotton however Punjabraoji, the chairman of sanstha maintained that it was managed by Gram sabha. Crop loans were extended by the Gram Sabha to individual farmers from the kosh. The cotton was collected by the gram sabha and sold through the sanstha to the state federation. The sale proceeds of the same were remitted to the gram sabha. The gram sabha after deducting the loan and the interest used to pay the balance to the individual member. Although it was stated that the sanstha would adjust the loans and charges too from the proceeds, the same was not reflected in the accounts.

According to Mankarji “the scheme was based on mutual faith and feeling of community welfare. There was no compulsion as such on the farmer to sell his cotton to the sanstha. People did it because they realized that they benefited. But a few members thought otherwise. They feared that their loans would be adjusted against the sale proceeds and there

fore sold their cotton independently. This mostly happened whenever there was a marriage or any other occasion in the family that required large sum of money in the absence of any other source the same was funded through loans from moneylenders. This caused problem on account of cash flows and loan recovery schedule and over the years more and more people started selling their cotton to private traders”.

### **Management of the Affairs of the Sanstha:**

According to Punjabrao Vithoba Kumare the present chairman “the original samiti comprised of 11 members. There is a committee of 7 members that looks after the day to day activities. The committee is responsible for all administrative decisions such as loan recovery, water sharing etc. The members co-opted a representative each from Assefa and the Bank as invitees to the committee meetings. They were expected to provide guidance and support as might be needed by the members”.

Over the years the composition of the committee and the chairman have not changed. According to Punjabrao “we prefer consensus and till date we have not had elections for the society.”

“The operational decisions of patalganga project are taken by the beneficiaries themselves and it is more for administrative convenience that both the schemes are included under the sanstha” Punjabraoji says.

### **The initial turbulence**

According to Anandrao Ramchandra Kokade “the village had two mahila mandals. One was responsible for managing the dairy and the other was granted loan for starting a flourmill. After a few years of successful operation the Mahila Mandal found it difficult to run the flourmill. At this juncture Punjabrao intervened and requested to run the flourmill for Rs. 600 per month. The amount was payable to the Mahila Mandal. The argument put forward by Punjabrao was that since electricity bill would be payable even when the machine remains idle, he be allowed to take over the flourmill. The arrangement continued for some time and thereafter Punjabrao stopped paying the monthly rent. I opposed this and pleaded that no one person should be allowed to run the flour mill and that others should also get a chance”.

“During the ensuing rabi season Punjabrao, who is also the chairman of the Jalsinchan Society insisted that the members should first pay the loan installment and only then will they be allowed to take the water. This was unreasonable, as it is very well known that around November none of us have any money. We have no objection to payment of loan installment and other charges but it is unreasonable to expect us to pay the same upfront. I therefore decided to opt out and not to take the water. Several of my friends too followed the suit with me”.

Bhimrao Shamrao represents the new member’s group that joined the sanstha “for a few years the affairs of the sanstha were smooth and there was no problem whatsoever. Subsequently, the committee started insisting on payment of maintenance charges and loan installment as a precondition to water release. This caused resentment among us. For how can a farmer pay these charges upfront? “I insisted that if I get water when I want then there is no reason why me or any farmer will not pay the loan installment. I am even prepared to work for recovery of the loan from erring members using force if need be”

“The changed method led to stopping of water for some of the members who could not pay the installment. After the harvest these members did not bother to pay their installment saying that since they did not take the water no charges are recoverable from them. A significant number of members who could not pay the installment dropped out in the process” Mankarji adds.

Anandrao Kokade says “even government agrees with our stand that loan installment much be recovered after the harvest but the chairman would have none of it and insisted that the installment must be paid in advance”. The members differed in their approach to supplying water to the farmers who had not paid the dues. Some of us were sympathetic towards them and felt that if he gets no water from where is he going to repay the loan. The committee often overlooked this aspect”.

“We used to hold annual meetings for deciding as to how water will be shared. The chairman instead that we first pay the loan and only then water would be released. Therefore only those who paid the loan installment got the water. We requested that some of us who do not have money at this juncture be given the water and promised to pay the installment on harvest but the chairman did not accept this. This was however was not the case earlier. As per the scheme it was decided that all charges would be recovered only after harvest” he says. “In my case since I did not take the water from the sanstha I too sold my cotton elsewhere to private traders for Rs. 1500/-<sup>8</sup>” Anandrao Says.

“The situation in patalganga was different. The farmers there shared all the costs and expenses directly without informing the sanstha or us. The power bills as and when received were shared by them and paid directly. This is the reason that power charges do not appear in the accounts” says Admane the accountant of the sanstha.

Around 1996-97 there were internal staffing problems at Assefa and according to Mankarji “much of time during 1996-98 was spent in administrative matters. Even though the court verdict favoured Assefa it had become certain that it would close its operations from Maharashtra. There were also rumours spread by vested interests that since Assefa is winding up its operations in the region the loans from Gram Kosh etc need not be paid. This campaign severely affected the kosh operations and our activities. There were several of us believed that in these years the development activities had come to a standstill and therefore even after withdrawal of Assefa work will have to be done. Gram Swaraj Sewa Trust was thus formed in Dattapur. Elsewhere similar NGOs were formed that are continuing the work of Assefa”.

Mr. Mankar is candid in assessing the past approach “there were several lessons for us. We realized that “welfare” approach does not really produce results. Earlier we believed only in giving. A family was provided everything from a rope to tie the cradle to the wood for funeral” he says. At GSST we have adopted a stance that unless the farmers repay the loans that they have taken from the kosh and establish their credit worthiness we will not work in those villages. Our relations with the individual villagers have

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<sup>8</sup>Under the cotton monopoly scheme of the Maharashtra Government cotton can be sold to the government at rates that are fixed by it. In practice small and marginal farmers prefer to sell their produce to private traders in view of the transaction costs and also the fact that the payment is offered immediately and in cash. The prevailing rate this year is Rs. 2100 per qtl

remained cordial but we are very clear that no development activity would be undertaken". " In the case of Jawahar sanstha after members started defaulting and breaking away, we saw no point in continuing our association after all the scheme was for their benefit. We maintained contact with the select few who take water. We are meeting many of the beneficiaries only today after a gap of nearly five years and I think we need to review our stance" he says.

### **The present situation**

According to Bhimraoji "the group started disintegrating from 1993 and we are now left with only 5 members. Since the remaining members had not taken water they were not prepared to pay the charges. The sanstha was supposed to pay the bill annually on hp basis and for all these years we did not receive the bill, the arrears were mounting. The per head charge which was fixed at Rs. 570 was inadequate to cover the electricity bills. The fall in the water table also added to the worries The accumulated arrears are about Rs. 32000. We do not know what the future is going to be like".

"We met the chairman many a times and also visited Assistant Registrar of Cooperative Society at Karanja a couple of times and requested that fresh elections be organized and new chairman be appointed but nobody paid any attention to our requests. Chance must be given to new people. Even though the society is of members, it was Assefa and its workers who were providing all the help for day to day functioning. " Anandrao says.

### **The future**

"With the lift irrigation we were growing about 150 quintals of additional food grains but the quantity is now reduced to 5 quintals. We are forced to buy wheat and other food grains from outside. This is because we do not sit together and discuss matters. Individualism has no place in running a sanstha. Mutual dialogue is the only way of resolving conflicts. Avoiding problems does not really benefit" says Bhimrao.

"Earlier days were better. Now no one sits in group and discusses common matters. Small individual groups have been formed and our society has been divided. Each is concerned only about his own self. This was the main reason. All are farmers and grow enough, a sum of Rs. 1200 or 1500 is not much of a burden and we have the capacity to recover the amount using force if need be" he says.

Anandrao Kokade concluded the meeting of 3rd September and said "even now things can be improved. All is not lost. We have only two demands. The existing chairman of the sanstha should resign so that others can get a chance and second the affairs of the chakki be handed over to the Mahila Mandal. Seventy percent of the villagers are with me and if Mankar sahab is willing to listen to us then things will come back to normal else things will remain the same".

Annex 1

Mahadapur - village profile

Population	Male - Adults	44
	Male - Children	65
	Female - Adults	57
	Female - Children	39
Land holders		33
Landless		7
Total Land		218 Ha
Literacy (nos.)	Male	58
	Female	24
Cattle Population	Bullock	37
	Cows	49
	Buffalo	38
	Goats	66

## Annex 2

### Projects Implemented by Association of Sarwa Sewa Farms (Assefa) during 1988-96

#### Socio Economic Activities:

1. Formation of Gram Sabha
2. Construction of community building
3. Grain Kosh
4. Formation of Women's Savings Groups
5. Formation of Mahila Mandal, Youth Groups
6. Community Kitchen Garden
7. Community Marriages
8. Health Services
9. Drinking Water Supply
10. Sulabh Latrine
11. Smokeless Chullah
12. Annual Gettogethers
13. Social Forestry and Horticulture
14. Rural Housing with CSV
15. Farmers training
16. Diagnostic programme for animals
17. Marketing support
18. Exposure visits and exchange programme for villagers

#### Economic Programmes

1. Crop Loan credit through Kosh to 25 families
2. Bullock pairs and carts - 6 nos
3. Thresher - 1 no
4. Milch Animals through Mahila Mandal - 3 nos
5. Goat through Mahila Mandal - 16
6. Community Lift Irrigation Scheme - 267 families
7. Bank Loan for milch cattle and crop loan - 9 families

Annex 3

Patalganga and Kolhapur Dam Scheme - Benefit Statement

	Patalganga Scheme	Jawahar Scheme
	Proposed - Rs. PA	
Interest on Principal Loan Amount/Investment	18,200	7,500
Depreciation	6,500	
Repairs	1,950	1,000
Management Charges	2,400	2,400
Loan Repayment @ Rs.13000 Pa	13,000	13,000
Power Charges	1,575	14,400
Total	43,625	38,300
Net Income Accruing to farmers	71,500	71,250
Benefit/Cost Ratio	1.63	1.86

Study of Community Lift Irrigation Schemes in  
Wardha and Yavatmal Districts of Maharashtra

Jawahar Adivasi Upsa Jalsinchan Sahakari Sanstha Ltd. Mahadapur, Tal. Karanja , Wardha (Jawahar Adivasi Coperative Lift Irrigation Society Ltd.)							
Profit and Loss Account							
							Amount in Rs.
Year Ending							
Income	March 1995	March 1996	March 1997	March 1998	March 1999	March 2000	March 2001
Bank Interest			12	0	21		93
<u>Charges Recovered</u>							
Kolhapur				240	1,825		
Patalganga				120	200		
Other Income					817	1,555	2,434
	0	0	12	360	2,863	1,555	2,527
Stationery			207	25	233	450	132
Admin Expense/Audit Fees			395	644	289	55	238
Dam Maintenance Expenses							2,435
Depreciation							21,024
Bank Commission			64	384	382	120	
Panchayat Water Tax Paid			650	1,653	0		
	0	0	1,316	2,706	904	625	23,829
Net Profit (Loss)	0	0	(1,304)	(2,346)	1,959	930	(21,302)

Study of Community Lift Irrigation Schemes in  
Wardha and Yavatmal Districts of Maharashtra

<b>Receipts and Payments Account</b>			Amount in Rs.				
<u>Receipts</u>	March 1995	March 1996	March 1997	March 1998	March 1999	March 2000	March 2001
Opening Balance		0	0	1,177	39	60	363
Sale of Cotton			488,705	366,663	260,848	488,859	475,918
Bank Account-Morangana(cotton)			484,980	373,905	260,953	444,954	548,184
Loan Recoveries - Kolhapur			12,656	1,000	3,275	500	1,600
Loan Recoveries - Patalganga			6,579		2,900	900	2,425
Loan - Others			2,946	1,268			
Bank Interest	0	0	12	0	21	0	93
Other Income	0	0	0	0	817	1,555	2,434
Charges Recovered-Kolhapur	0	0	0	240	1,825	0	0
Charges Recovered-Patalganga	0	0	0	120	200	0	0
	0	0	995,878	744,373	530,878	936,828	1,031,017
<b>Payments</b>							
Payment to Farmers for Cotton			493,677	366,437	269,044	445,980	518,797
Bank Account-Morangana(cotton)			487,205	358,023	260,849	488,860	508,794
Due to Sarva Sewa Farms			4,500				
Bank Account-Wardha Cooperative Bank			12		21	1,000	93
Loan Repayment BoI-Kolhapur			5,000	15,900			
Loan Repayment BoI-Patalganga			2,946	1,268			
Security deposit			45				
Water Tax	0	0	650	1,653	0	0	0
Stationery	0	0	207	25	233	450	132
Admin Expense/Audit Fees	0	0	395	644	289	55	238
Dam Maintenance							2,435
Bank Commission	0	0	64	384	382	120	0
Closing Balance	0	0	1,177	39	60	363	528
	0	0	995,878	744,373	530,878	936,828	1,031,017
<b>Balance Sheet</b>			Amount in Rs.				
Year Ending							
	March 1995	March 1996	March 1997	March 1998	March 1999	March 2000	March 2001
<b>Liabilities</b>							
Share Capital	11,500	11,500	11,500	11,500	11,500	11,500	11,500
Loan Funds-							
Sarva Sewa Farms,Morangana		312,209	291,023	291,023	291,023	291,023	291,023
Bank of India, Morangana			14,633	0	0	0	0
	0	312,209	305,656	291,023	291,023	291,023	291,023

Study of Community Lift Irrigation Schemes in  
Wardha and Yavatmal Districts of Maharashtra

Profit/(Loss) Account							
Opening Balance		3,375	3,375	2,071	(275)	1,684	2,614
This Year-Profit/(Loss)	0	0	(1,304)	(2,346)	1,959	930	(21,302)
Closing Balance	0	3,375	2,071	(275)	1,684	2,614	(18,688)
Cotton Sale A/c		12,941	7,969	8,196	0	42,879	
Grant Received	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Security Deposit	45	45	0				
	36,545	365,070	352,196	335,444	329,207	373,016	308,835
<u>Assets</u>							
Cash and Bank Balances		14,512	17,926	906	844	46,053	6,420
Loan Recoverable from Members		296,375	280,087	280,355	274,180	272,780	290,199
Other Assets(Building,Furniture)		54,183	54,183	54,183	54,183	54,183	54,183
	0	365,070	352,196	335,444	329,207	373,016	350,802
Note: The above statements have been suitably modified to ensure YoY comparison							