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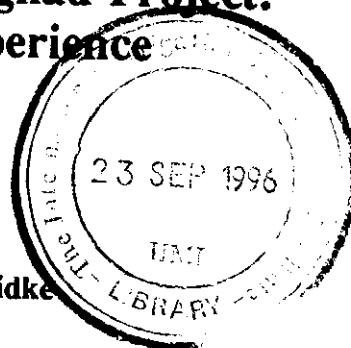
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Status of Irrigation Management Transfer in India

**Water Users' Association in
Minor 17, 18, 18A, 19, and
Distributary 1, Waghad Project:
Farmers Experience**

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**Water Users' Association in Minor 10 (Shevare), Bhima
Project: Farmers' Experience**

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Foreword

This booklet is one of the series of short narratives about farmers' efforts to create and manage water user associations. The purpose of the series is to provide other farmers in the state with succinct, readable, and interesting information about these efforts that might enable farmers to improve their access to the irrigation services. This study is being published in both Marathi and English. See the back cover for information about the other narratives in this series.

This narrative was written by Gajanan A. Tidke under the guidance of IIMA and IIMI team members. He lived with the farmers described here from October, 1994 to April, 1995. While there, he interviewed and observed the farmers in order to document the water user association and irrigation management transfer process at this site. The information presented here reflects the ideas and opinions of the farmers themselves.

Gajanan A. Tidke's effort was part of the study on Status of Irrigation management Transfer in India being carried out from 1993 to 1995 by the Indian Institute of Management, Ahmedabad, and the International Irrigation Management Institute, Colombo, with funding from the Ford Foundation. The study investigated and documented the policies and activities of agencies, non-governmental organizations, and others with regard to promoting irrigation management transfer from the government to farmers. The overall goal was to contribute to formulation of effective policies and programs with regard to irrigation management transfer in India. In addition to this series of short narratives, study results are reported in more traditional research reports and other forms.

The primary members of the IIMA/IIMI study team were Shashi Kolavalli, Amarlal Kalro, Gopal Naik, and S. Ramnarayan from IIMA, and Jeffrey D. Brewer, R. Sakthivadivel, and K.V. Raju from IIMI. Editing in Marathi was carried out by Sudhir Sevekar and Suryakant Saraf. The edited first draft was translated into English and reviewed by the study team, particularly by S. Ramnarayan and Jeffrey D. Brewer.

The members of the study team, including Gajanan A. Tidke, wish to thank the people of Village Ozar, concerned government and non-governmental agencies who gave their hospitality and time to answer questions and explain how things work without expecting compensation. We sincerely hope that their experiences will be useful to others.

Jeffrey D. Brewer
IIMI

Gopal Naik
IIMA

Water Users' Association in Minor 17, 18, 18A, 19, and Distributary 1, Waghad Project : Farmers Experience

Ozar is a village on the Bombay - Agra national highway some 18 km east of Nashik city. Around 1961, when the government of India set up air force station and the MIG aircraft factory at Ozar, and this small village started developing. Today, the population of Ozar is nearly 50,000 though still a village. Ozar now has got all modern infrastructural facilities.

Proximity to Nashik city is another salient feature of this village. Ozar itself is a market place for small villages nearby. Nashik district as a whole and Ozar in particular is known all over the state and the country as a centre for onion and grape cultivation and marketing. The predominant castes are the Marathas and Malis, Other castes in the village include Brahmins, Muslims, scheduled castes and scheduled tribes. The Banganga river flows near the village. An earthen dam on the Banganga river was constructed by late Ahilyabai Holkar, the Maratha ruler of Indore some two hundred years ago. The dam is useful even today for storage of water which is mostly used for drinking purposes and some for irrigation.

Construction of Waghad Dam

This area is considered a semi drought prone area. To provide water for irrigation, the government of Maharashtra constructed a dam across the river Kolvan, a tributary of Godavari river. It is one of the many dams constructed under the Upper Godavari project. The dam's storage capacity is 2700 TMC, out of which 150 TMC is dead storage, 1020 TMC of the water is meant for irrigating land in Palkhed village and 1530 TMC water is for irrigating land in Waghad village. Initially there was only one left bank canal of 15km length. But people on the right bank made persistent demands for a right bank canal. The irrigation department constructed a 45 km long right bank canal.

The irrigation capacity of the Waghad Left Bank Canal is 1650 ha. and of the Right Bank Canal is 5100 ha. Besides some water is used for lift irrigation. Average rainfall in the Ozar area is around 400 to 700 mm per year. Rainfall is inadequate to take rabi crops. Wells also do not have adequate water. Before the Waghad dam was constructed, farmers used to take bajra, rice, onion, and groundnut in kharif and rarely pulses. Only farmers having wells grew rabi crops. Area under horticulture was also very limited. After December every year, there was scarcity of water. The situation of agriculture in the command area of the Waghad right bank canal is still not very satisfactory. Farmers at the tailend did not get water because of heavy seepage and also because the canal has been broken by many farmers to take water to their farms.

There are 19 minor distributaries along the Waghad right bank canal. The water user societies which have been discussed in this report are on five distributaries towards the tailend of the canal. The Banganga society is on subminor 3, the Mahatma Phule society is on sub-minors 17 and 18, and the Jai Yogeshwar society is on sub-minors 18-A and 19. Areas under irrigation are as under:

Banganga society	216 ha
Phule society	340 ha
Jai Yogeshwar society	595 ha

The overall situation of agriculture and the economic status of farmers belonging to the Banganga society are much better because of better quality soil in the area and availability of water from the old dam.

Formation of Societies

The formation of these three water user societies. It all started in May 1990, when a seminar on water management was arranged at Rahuri by the Mahatma Phule Agricultural University. Representatives of a Pune based voluntary organization known as Society for People's Participation in Ecosystem Management explained the concept of water user society and how such a society was functioning at Chanda in Ahmednagar district.

Among the several who attended the seminar were Bapu Upadhye, Chairman, and Mr. Bharat Kawale, Secretary, of Samaj Parivartan Kendra, a non-government organization functioning in the Nashik-Ozar area for some time. They requested SOPPECOM'S representatives to help them in setting up such a society at Ozar. Besides a formal meeting in June 1990, representatives of SOPPECOM and Samaj Parivartan Kendra, organized over 35 small meetings to explain the concept at several small settlements in the region.

After considering the geographical aspects, it was decided to organize three societies to cater to the needs of the farmers of the area, and for a wider coverage of irrigation. While the secretary, and the office for these three societies would remain common, the chairman, secretary and promoters would be different. The Share amount was fixed at Rs. 25 per farmer and the admission fee at Rs. 5. Besides, these Rs. 25 was collected from each farmer for the initial administrative expenses.

The three societies were formally registered in March 1991. It took a few rounds of discussions to decide the quota of water to be given to the societies and the schedule. The quotas of the societies are given below :

Water Quota (as per the Agreement)				
Society's name	Area CCA ha.	Kharif (Water in thousand cubic mtrs.)	Rabi (Water in thousand cubic mtrs.)	Total Water (Water in thousand cubic mtrs.)
1. Banganga	216	424	528	982
2. Mahatma Phule	340	440	1016	1456
3. Jai Yogeshwar	595	1216	1410	2626
Total	1151	2080	2924	5034

If a society did not take its quota, the balance water could be stored in nallahs and small bandharas in the society area. Similarly water which was not taken in kharif (because of good rains) could be used in Rabi and in hot weather seasons. Further to encourage the farmers, the irrigation

department agreed to give 20 per cent more water. Season wise dates for water distribution were decided upon as under:

Kharif season : up to October 31st.

Rabi season : up to March 15th.

For hot weather or summer season : Depending upon availability of water.

All these details were incorporated in the agreement between the irrigation department and the societies. The agreement were by and large modeled after that of the Datta Society.

Joint Inspection of Canal

Before the canal was formally handed over to the society, a joint inspection of the area, particularly of the irrigation structure, was carried out. It was found during this inspection that many field channels were not in existence. The irrigation structures' also required repairs. The society promoters and NGO representatives persistently followed up this matter, and ultimately the irrigation department sanctioned Rs.22.5 lakh in February 1991 for constructing field channels and repair work. The repair and construction work began in May 1991. The initiative taken by the villagers of Sonewadi deserves a special mention. Owing to the geographical features of the village (high level) villagers were afraid that they would not get any water. They took the positive step of working on the construction of the distribution structure.

A formal agreement between the irrigation department and the societies was signed in November 1991, giving the details of the repair work to be done by the irrigation department. In March 1992, the canal and the water distribution structure were formally handed over. After this, office bearers of the three societies were selected unanimously for three years. They are under:

Banganga Society	Chairman	- Ramdas Mandlik
	Vice-Chairman	- Murlidhar Kasar

M.Phule Society Chairman - Rajabhau Kulkarni
Vice-Chairman - Parvatabai Shinde
Jai Yogeshwar Society Chairman - Vishnu Pagar
Vice-Chairman - Ramnath Wabale

A management committee consisting of 14 farmers for each society was also formed which would hold office for three years. It includes 3 representatives of Samaj Parivartan Kendra, the NGO which had taken the initiative in setting up the societies.

The farmers later suggested that there should be a common management committee for the three societies. A nine member common committee was formed. It consisted of the three chairman, two representatives of the Samaj Parivartan Kendra, one farmer with engineering qualification, and three senior farmers of repute from the region. This committee provided a platform to discuss common problems the societies were facing.

The condition of field channels was not satisfactory before the formation of the societies, farmers had also developed a very bad habit of cutting the canal and taking the water. But in the last five years the situation in this regard has improved a lot. The Societies have even stopped supplying water to two nallahs in the region, namely Gagra nallah and Satwai nallah. They have also repaired two old dams on the Banganga river. With help from Zilla Parishad, societies have constructed four dams on Satwai nallah, 11 small dams on the Gagra nallah and two dams on Banganga river in 1993. Work on 2 more dams is in progress.

Economic Changes

These water conservation efforts have yielded very good results. The groundwater level in the region has gone up. According to the Mahatma Phule Society's chairman, the increased groundwater table is equal to one monsoon! Earlier only an area of around 50 ha. was irrigated by canal and groundwater in the three societies. Area under irrigation in 1994-95 had increased tremendously, as shown below:

Area Under Well and Canal Irrigation (for Rabi 1994-95 season)	
Society	Area (in ha.)
Banganga	166.50
Mahatama Phule	121.85
Jai Yogeshwar	292.80
Total	581.23

Significant changes have also occurred in the cropping pattern. Many crops which were not even considered earlier, are now cultivated regularly. This includes sunflower, pulses, vegetables, jowar, and grapes. Crops are taken in all the three seasons instead of only in kharif as in the past. It has become difficult to get labourers to work on farms. The cropping pattern show a clear shift from cereals and traditional crops towards cash crops, like grapes, sugarcane, vegetables, onion, wheat, flower etc. The situation in the command area of Mahatma Phule and Jai Yogeshwar societies had changed very dramatically. Some farmers in this region are now harvesting strawberry, a completely unknown crop to the farmers earlier. Farmers are nowadays using hybrid seeds of leading seed companies. Use of insecticides and pesticides has increased. Farmers are having now more income and banks have started giving larger crop loans. Yield per acre of wheat and sugarcane has almost doubled. The agricultural scenario of the Jai Yogeshwar society appears to improved much faster when compared to the other two societies. Even the small farmers in this area have become richer.

Attitudinal Changes

There has been a significant change in the attitude of farmers. In the past, they routinely bribed the government patkari to take more water. It was not very uncommon for farmers to steal water from the canal, break and

damage the canal etc. All these practices have now come down. A fair amount of discipline is observed in water distribution. The farmers are prompt in repairing and maintaining field channels. For such work farmers were putting their own labour and money. In the Jai Yogeshwar society area, a new field channel had been constructed on outlet number seven by the farmers and has brought 100 ha. land under irrigation. This had set a good example for the farmers. Farmers on outlet number five have also taken initiative in constructing field channels.

To make the financial base of the societies, sound, SOPPECOM had suggested to start giving agricultural implements on hire as an activity. The Banganga and Jai Yogeshwar societies purchased a few agricultural implements which can be hired by the members of all the three societies. Though the office bearers have different political affiliations they work unitedly. The Samaj Parivartan Kendra had paid special attention to this aspect. The societies are working successfully. The Societies were able to stop the use of motors for illegally lifting water from the canal by informing about it to the state electricity board. The office bearers have also established good rapport with the irrigation department personnel.

Water Distribution and Canal Maintenance

Even before they were formally registered, the societies had started water distribution. They sent two patkari for training at Water and Land Management Institute (WALMI), Aurangabad. The patkaris ensured that water is not wasted and that the distribution is done systematically and equitably. For irrigating one ha. of land, water was given for twelve hours. Yet the water distribution schedule is not followed rigidly. The Banganga society spent Rs. 34,120 on canal repairs in the third year of its operation. The Mahatma Phule spent Rs.34,145 and the Jai Yogeshwar Rs. 24,102 on canal maintenance. Canal repairs have reduced water loss owing to seepage. To raise adequate funds for repairs work, the societies had initiated a system of charging fees on wells in the command area. Initially, this did create some sort of unrest among farmers. But after detailed discussion, they accepted the societies decision.

The societies have received government subsidy of Rs.100 per ha. for first two years and Rs.75 per ha. for the third year for canal repairs, from the government. Besides they get 5% rebate on prompt payment of water charges. The irrigation department has supported the societies by responding promptly to its requests for miscellaneous repairs. SOPPECOM and the Samaj Parivartan Kendra facilitated the process of building rapport between the government agency and the societies. As NGOs helped farmers from time to time in a variety of matters, they enjoyed a very high degree of respect and goodwill in the region.

Data regarding the number of members, total beneficiaries, total cultivable area, and area under irrigation for the three societies are given below :

Society's Name	Area of members under irrigation	No. of members	Area of beneficiaries under irrigation in ha.	Total No. of beneficiaries
Banganga	170	168	216	250
M. Phule	212	116	340	175
Jai Yogeshwar	348	261	595	339
Total	730	545	1151	764

Functioning of Management Committees

The chairman of the Mahatma Phule society is an agricultural graduate. As he possessed many leadership qualities, farmer members of his society as well as those of other two societies respected his views and ideas. The patkaris were trained by him in water distribution activity and reported to the chairman everyday when the rotation of water was going on. The Chairman visits the fields very often, particularly for sorting out the problems reported by the patkari. Members farmers who do not stick to the rules or regulations of the society or break the discipline, are penalized by the society. Attendance in monthly meeting is not very high but not too low either.

A notable feature of the Jai Yogeshwar society is that most of the members are followers of Pandurang Shastri Athawale, a religious personality propagating 'Swadhaya' (meaning self study and self development) philosophy among the masses. Its command area is far from the society office. As a result, the society held its meetings not in the society office but at Sonewad or Shejwalwadi, two convenient settlements of farmers belonging to this society. Farmers attend society meetings in a large numbers. The chairman of Mahatma Phule society is also a follower of Pandurang Shastri Athawale. This has served to strengthen the links between the Mahatma Phule and Jai Yogeshwar societies. The understanding, cooperation, and rapport between the two societies is very good. However, this does not mean that there is any kind of tension among three societies. As a matter of fact, inspite of the fact that a common management committee has not yet been formed, during the current year 1995, the three chairmen, and members of SOPPECOM, and the Samaj Parivartan Kendra sat together to discuss society problems.

As regards the availability of water, the Banganga society is in a very advantageous position owing to natural reasons. For example, the seepage of water has been of much help to the farmers on the left bank of the Banganga canal. Similarly, the drainage water for the MIG Air Force Station also came to this area only, which was used by around 20 farmers to irrigate their land. However the basic norm of water distribution i.e. the water must be given to tailend first and then to headend is not strictly followed in all the societies. The number of farmers who were breaking the main canal had increased in the last two years. The management committee was unable or unwilling to check this effectively. The society patkari tried to bring discipline in water distribution, but was not very successful. He said that he did not receive the backing and support from the society's management committee. The indiscipline had resulted in conflicts and quarrels among farmers in some cases. Discipline in Mahatma Phule and Jai Yogeshwar societies is much better. Jai Yogeshwar Society had bought a motorbike, which was used to keep an eye on water distribution. At the time of the last rotation in Rabi season, all the farmers tried to get maximum water, because they were not sure of getting the water. This uncertainty and anxiety, among farmers created

some degree of indiscipline. The management committee of the societies had noted this fact, and so had become more particular in the following rotation to ensure that all the members in the command area received water. But the time limit of 10 hours per hectare was not followed strictly. The farmers were not willing to take water during night hours when it was not only very cold but also there was fear of snakes and other reptiles. According to some farmers, some members took water during night hours and later also during day hours, on the pretext of not having taken water in the night. The canal of Jai Yogeshwar (minor number 19) is 4.48 km long and has several outlets. Water distribution is done through 3-4 outlets simultaneously. It is difficult for one patkari to pay attention to all these outlets simultaneously. There is also some water wastage on this account. But the patkari and the Chairman have made every effort to minimize the wastage of water. If any farmer is found wasting water, he is immediately warned, and at times penalized as well. Water gauge recorders are fitted on all the four canals of the three societies. The Patkaris take readings at least two or three times in a day. Irrigation department officials also take the readings. The society patkari and irrigation personnel signed each other's meter reading registers. However, irrigation department personnel complain that meter reading is not done carefully.

Collection of Water charges

Water charges collection of the societies for the first three years (1991, 1992 and 1993) was very satisfactory. Among the societies, the performance of Jai Yogeshwar and Mahatma Phule had been better. The Banganga societies collection for the last year 1994 was very low. Though the members of Banganga society were quite rich, they were not very particular in paying the water charges. Lethargy and negligence among society officials was also responsible for poor collection. Another aspect which needs societies attention is the condition of the canal and field channels. Many farmers are very careless about the maintenance of field channels. In society meetings, this issue is discussed regularly. Farmers agree to repair and maintain their field channels in the meeting, but do not keep up their promises.

Future Plans and Federation

Nine cooperative water user societies now function on the Waghad right bank canal. Five of them are towards the tailend. The office bearers of Banganga, Mahatma Phule and Jai Yogeshwar wanted to form a federation of all the cooperative water user societies functioning in the state of Maharashtra, so that they could unitedly face the different problems. But nothing concrete in the direction of formation of such a federation has taken place so far.

Another notable thing is that some farmers are expressing their displeasure over the involvement of the Samaj Parivartan kendra. In fact this NGO and SOPPECOM have played a very important role in the formation of the three societies. Even today, their involvement in society functioning is very tough.

Future plans include setting up independent offices and increasing the area under irrigation. With the help of two credit societies in Ozar village, these societies have been able to buy a number of agricultural inputs such as seeds, fertilizers, pesticides, and agricultural implements etc. in bulk quantities which were then sold to the farmers or given on hire. The societies are keen to expand this activity. The Mahatma Phule society had plans of buying a tractor and a cultivator machine.

List of case studies published in local languages under Irrigation Management Transfer Project

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1. Water Users' Association in Anklav Subminor, Mahi Kadana Project: Farmers' Experience
2. Water Users' Association in Right Bank Canal of Pingot Medium Irrigation Project: Farmers' Experience
3. Water Users' Association in Left Bank Canal of Baldeva Medium Irrigation Project: Farmers' Experience
4. Water Users' Association in Bhestan Minor (Mohini), Ukai Kakrapar Project: Farmers' Experience
5. Water Users' Association in Bhima Lift Irrigation Scheme: Farmers' Experience

Case Studies conducted in Maharashtra and published in Marathi

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5. Water Users' Association in Hadshi Minor Irrigation Project: Farmers' Experience
6. Water Users' Association in Minor 17, 18, 18A, 19 and Distributary 1, Waghad Project: Farmers' Experience
7. Water Users' Association in Minor 10, Bhima Project: Farmers' Experience

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2. Water Users' Association in Kedar Tank: Farmers' Experience
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4. Water Users' Association in 28L and 29R Outlets of Mettupalayam distributary in Lower Bhavani Project: Farmers' Experience
5. Water Users' Association in Malayadipalayam Distributary of Parambikulam Aliyar Project: Farmers' Experience
6. Water Users' Association in A9 Mahilanchery Channel (Saliperi), Cauvery-Valappar Project: Farmers' Experience
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