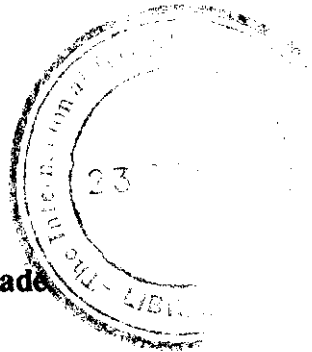


**Status of Irrigation Management Transfer in India**

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

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December, 1995**

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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 Sanjay D. Parade 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.

Sanjay D. Parade'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, Amarial 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 Shashi Kolavalli and Gopal Naik.

The members of the study team, including Sanjay D. Parade, wish to thank the people of Village Shevare, 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  
IMI

Gopal Naik  
IIMA

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

Much of Maharashtra receives scanty rain and certain parts always suffer from drought. Many villages situated in the Sahayadri hilly area go through this usual condition. Almost the whole of Solapur district is hilly area. Bhima the rivulet of the Krishna river, originates from Bhima Shankar and flows south-east. It used to take a large quantity of water flowing out of the hilly area in the monsoon. But the water was not at all used anywhere. Water scarcity was very much felt after the monsoon. The government thought of constructing a dam across the Bhima river with the intention of storing the rain water. The spot selected for the dam was Ujjani village, situated in Madha taluka in Solapur district. The Bhima river travels 268 Km to Ujjani from its origin. Construction of the dam was begun in 1966 and completed about fourteen years later in 1980. The World Bank funded the construction of the dam. The dam is nowadays called Yashwant Sagar.

The dam immediately brought prosperity to the people in the area. Dry areas where nobody hoped to grow crops changed into agricultural land. The area changed its form and feature. On the left bank canal of Yashwant Sagar there is a small village called Shevare. Blessed by the residence of a Sharwar, a hermit, the village was named Shevare. It belongs to Madha taluka in Solapur district. The population is only 1800. This village also benefitted from the dam.

This village area is divided into four outlets. The major part comes under the minor canal no. 10 alongside of which Shevare village is situated. Shevare got water but progress was far away. The village changed its appearance only after the Laxmi Narsimha Canal Water Distribution Society was formed. This society helped the village to walk towards prosperity and progress.

## **Formation of the Society**

A lamp in a house gives the neighbour bright light. Something like that happened here. On the left canal of the Bhima, was the Siddheshwar Canal Water Distribution Society. The farmers there, were using water from the river for agriculture. There was no government employee to stop them from using the water. They were the authority over the water they were taking.

The people of Shevare saw the benefits derived by the Siddheshwar society. The ex-police patil of Shevare village, Shri Saudagar Bapurao Maske, asked the villagers: Why shouldn't they also form a water distribution society. The Bhima irrigation officers visited the village and discussed the formation of a water distribution society. The Laxmi Narsimha Canal Water Distribution Co-operative Society was formed in 1991. (The society is named after the village deities.) Generally old and wise in the village come forward for such things. They convince people and face the opposition. Many people like Nagnath Sitaram Ranmaal, Haribhau Sutar, Ankush Maske, Siddheshwar Maske, Pandurang Sutar, and Dhananjay Dunakhe joined hands with Saudagar Maske. The membership grew in course of time. The society today irrigates 217 hectares of land.

Eighty per cent of the Shevare population belongs to the Maratha community. With a few exceptions, all are farmers. Others in the village are working in fields. Owing to scanty rains, the area is drought affected. The soil is medium, black, and rocky sometimes, and suits grain crops in general. Rainfall is average, 500 mm in a year. It is impossible to grow crops except jowar, wheat, and bajara. Even these crops came to be grown only at the whims of the rains. If there was no rains, the villagers would go long distances in search of labour work and would return to their homes with hopes again of rain and a new life.

With the availability of water, farmers started growing sugarcane in addition to other crops. Sugar factories came up in the area and demand for sugarcane simultaneously grew. There were, however, obstacles to growing sugarcane. The irrigation department gave water to the farmers

but its rules stipulated a fixed crop ratio. In spite of the increasing demand, farmers could not grow more than 7 per cent sugarcane. Small farmers who were less capable of overcoming the rules continued to grow only jowar, wheat, and bajra.

Illiterate farmers not familiar with bureaucratic ways faced many difficulties in getting water. They did not know how to make an application for water. Sometimes there was nobody when the farmer went to the irrigation office branch with his application. If at all there was an officer, he would tell the farmer to reapply. After all the formalities the farmer had to please the patkari, if the water was sanctioned. Patkari - the lowest ranked workman in irrigation- was the highest officer for the farmer. His cooperation was not assured to the innocent farmers. The small farmers were not always able to please him whereas the rich farmers managed to do so for their greater benefits. They could turn the small farmer's stream for their crops. They could manage to get the crop ratio increased.

How could the small farmer benefit by having sugarcane in a small piece of land ? His efforts were not much fruitful. It was difficult to please the irrigation officers. For one reason or other, water supply was irregular for him and, as a result, he had to bear the loss. Seventy per cent small farmers having less than one hectare of land were along side Minor no. 10. These were the Maratha farmers cultivating their own land. At last, they decided to establish their own water distribution cooperative society.

### **Formation of Water Distribution Society**

The irrigation department officers who distributed Bhima water realized the gravity of the problem. Engineers from the Command Area Development, Solapur had also similar ideas. They had before them the example of the Siddheshwar Water Distribution Society which was nearby. Irrigation officials wanted the Shevare villagers to follow the same example. So, the CADA administrator and engineers from the irrigation department called a meeting in the village to discuss the formation of a

cooperative water distribution society. Water availability assurance, crop freedom, percolation benefits, etc. were explained to the farmers.

In the third meeting, the formation of a society was finalized. Shri Nagnath Sitaram Ranmaal was proposed as the chief promoter of the society. Some more members were chosen to help him. The irrigation department officers were guiding and helping the villagers at every step. A time table for distributing water was also prepared by the officers.

A fourth meeting was called in September 1991 in the presence of many irrigation officers to register the society and open a bank account. Nagnath Sitaram Ranmaal was chosen as chairman of the society by the villagers. Dhananjay Dattatraya Dunakhe started working as the secretary. Only fifty rupees was collected as membership fee. During the first year, the society managed to collect Rs.4,650.

A general body meeting was called in June 1992 to hand over the minor canal to the society. The outlet was handed over to the society from the kharif season beginning in July 1992. The society started working from this day. An agreement was signed between the society and the irrigation department in May 1993 at Pandharpur. According to that agreement, the command area was 217 ha and the area to be irrigated was 169 ha.

Other points in the agreement were:

- 1) The society will take water from the irrigation department on voluntary basis and supply to users on crop area basis;
- 2) The society will maintain and repair field channels, drains and other structures for which it will receive a grant of Rs.20 per hectare;
- 3) The society had a right to receive 0.77, 0.86 and 0.62 mcms of water during kharif, rabi and summer subject to availability;



- 4) The society can use the unused balance of rabi in summer for irrigating crops other than sugarcane;
- 5) Demand for additional water will be considered subject to discretion of the irrigation department;
- 6) If the water table rises to within three meter from the ground, the government reserves the right to reduce water supplies.

In addition, as an incentive, the government will give a managerial subsidy of Rs.,100 per hectare for the first two years and Rs.75 per hectare for the third year. The government will also provide the services of one casual inspector for three years. Charges would not be levied for the use of percolated water.

Minor No. 10 had seven outlets and every outlet has one panch committee to solve the problems arising from water distribution. Two sub-committees also have been formed to help these committee for easier water distribution and collection of water charges.

The society has a board of directors consisting of thirteen members. The secretary is appointed by the board and is paid Rs. 650/month. In order to ensure systematic water distribution, the society has appointed a patkari, who is paid Rs.600/month.

The villagers have benefitted in many ways with the formation of the society. The responsibility of water distribution as well as other related works now rests with it. Area wise water distribution is now the society's responsibility. At the same time, it has tried to provide modern technology in water management to the members. The society has taken precaution to avoid land becoming waterlogged through frugal use of water to reduce water wastage.

The chairman spends an hour in the morning as well as in the afternoon for society work. His main job is to supervise the work of the secretary and the patkari. He also chairs the monthly meetings and takes decision.

The secretary issues water tax receipts, makes water distribution and water charge charts etc. Though actual water distribution is done by the patkari, supervision and guidance is to be done by the secretary only.

Checking the field channels, keeping various records such as water record, water demand note, irrigated land report, etc are the work of the patkari. He also reports on these to the society office and the irrigation department section office.

According to the agreement with the society, the Bhima irrigation division gives 2.25 million cubic metres (MCM) of water to the society, divided as 0.77 MCM for kharif, 0.86 MCM for rabi, and 0.62 MCM for summer.

The society is allowed to take extra water if it has used less than the sanctioned quota during the previous season. The extra water would not exceed the saved water. With an advance request the society can demand extra water for a particular season. Water rotation used to be twice in kharif and five times in rabi and summer. Society formation brought a change in the system. Now it is three times in kharif and six times in rabi and summer. It is not only one extra turn that brings the benefit but water is given when it is needed.

Outlet number 10/1 A is long and covers a larger area. Water flow slows down at the tail end though carrying one cusec of water current throughout. The time allotted by the society proves short. Today this field channel soaks less area as it is broken at several places and is not properly lined up.

### **Water Charges**

The society buys water from the irrigation department by volumetric method. But while charging water tax to the beneficiaries it applied area ratio i.e. if the society charges the amount of tax per hectare, charges vary with the crop. For kharif cultivation it was Rs.80 per hectare and now it is Rs.150 per ha. Wheat or groundnut in rabi is charged Rs.200 and

Rs.300 p.a. Sugarcane was charged Rs.1500 per ha in the beginning and now Rs. 1750 per ha.

The society had collected Rs.8,304 in kharif, Rs.25,276 in rabi, and Rs.38,288 in summer as water charges during the first year. The government had charged the society Rs.3,105.79 for kharif, Rs.16,184.00 for rabi and Rs. 32,985.79 for summer. The society paid the water charges on time and hence the government gave 5 per cent concession according to rule, amounting to Rs.155.25, Rs.809.23 and Rs.1,649.30 for kharif, rabi and summer respectively. The expenditure for the society during this year was Rs.19,678.00 and the profit Rs.2527.10. During the next year, water charge collection was Rs.8,258.00, Rs.34,766.40, and Rs. 51,751.11 for kharif, rabi and summer respectively. The government charges were Rs.2,574.00, Rs.11,848.36, and Rs.47,416.64 respectively. This year too, the society got a discount of 5 % in the water charges for prompt payment. The discounts were Rs.128.75, Rs.592.42, and, Rs.2,370.05 for respective seasons. The society reported a profit of Rs.8,895.00 and spent Rs.27,205.00.

In 1994-95, the third year of the society, kharif water charge collected from farmers was Rs. 19,614.00. The government's charge was Rs.8,348.80. The discount for prompt payment was Rs.347.87. The kharif season gave a profit of Rs.11,265.20 to the society. The society has a bank balance worth Rs.19,051.00. Twenty five per cent of the management grant from the irrigation department is to be received yet. This is the first year's grant. The second years' grant worth Rs.16,896.00 also has been credited to the society's account.

The executive committee is authorized to decide about the amount of expenditure on certain works. It has to be sanctioned before hand. In emergency, at least fifty per cent of the board members must be present for accounting sanction.

## **Water Distribution**

The society operates on Minor No.10, which is 660 metres in length. Its water carrying capacity is 9.5 cusecs out of which 7.5 cusecs water is used. In order to distribute water in an easy way, there are seven outlets on this minor. An outlet has members ranging from seven to twenty three. Irrigated area of each outlet varies from 5.60 ha to 20.70 ha.

The minor covers an area of 217.06 ha. While 168.96 ha of can be irrigated with this minor, 122.15 ha is irrigated at present. During the rabi of 1994-95 the irrigated area was 88.80 ha. Area irrigated for different crops is as follows: Sugarcane, 62 ha, Jowar, 10.50 ha, wheat, 6.45, maize 3.00 ha, grams, 1.95 ha, sunflower, 1.00 ha and percolation water sugarcane 4.20 ha.

Water distribution is done by turn. The member is informed of his turn after taking into account his crop. Nobody tries to jump the queue.

The society has given an assurance of easily available water to the beneficiaries. Crop pattern has changed thanks to easy availability of water. Eighty percent of the farmers have turned to one cash crop-sugarcane. They do not have to worry about marketing sugarcane as there are sugar factories nearby.

Green grass is in plenty. Most of the farmers keep cattle and depending on this cattle wealth, dairy business has developed on a large scale. There are three cooperative milk schemes in Shevare and all are doing good business now. The farmer can improve his economical condition with the support of the cattle wealth.

The society still faces difficulties in making its members adhere to warabandi rules. As the society has given freedom to grow crops of their wish, warabandi system has to be observed completely. In the last rabi season, it warabandi was observed during the fifth four water turns, but totally collapsed during the fifth water turn because the society got water very late. The same thing happened during this summer season as the

irrigation department did not supply water on time. Farmer took their own time to irrigate their land and this caused the routine to go astray.

### **Outlook for the Future**

The society is planning to undertake new schemes. One of them is selling fertilizers to members. An application for a permit has been made. Another is to try some tractors and hire them out to members.

In the coming years, water scarcity will be felt in summer. This seems inevitable going by the last few years' experience. At present there is a cut in water supply during summer. The government is planning to supply water for eight months in a year from the year 2000. That will be the period of troubles and financial loss for the farmers. The society plans to make jackwells in the command area to supply water during the summer months in future.



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7. Water Users' Association in Minor 10, Bhima Project: Farmers' Experience

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