Status of Irrigation Management Transfer in India

Water Users' Association in Anklav Subminor of Mahi Kadana Project: Farmers' Experience

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International Irrigation Management Institute, Colombo
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Water Users' Association in Anklav Subminor of Mahi Kadana
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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 Gujarati and English. See the back cover for information about the other narratives in this series.

This narrative was written by Kamlesh K. Patel 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.

Kamlesh K. Patel'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, Amaral Kalro, Gopal Naik, and S. Ramnarayan from IIMA, and Jeffrey D. Brewer, R. Sakthivadivel, and K.V. Raju from IIMI. Editing in Gujarati was carried out by Barin Mehta. The edited first draft was translated into English and reviewed by the study team, particularly by Shashi Kolavalli and K.V. Raju.
The members of the study team, including Kamlesh K. Patel, wish to thank the people of Village Anklav, Bhetasi, and Ambali, 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
Introduction

The importance of water in agriculture can be realized when one sees crops drying without water. In the command area of the Anklav subminor canal passing through the villages of Anklav, Bhetsi and Ambali of Borsad taluka of Kheda district, the problems were different. Even though water was available in plenty, defects in irrigation department administration of and lack of cooperation among farmers of the three villages created problems in irrigation.

Till 1987, farmers were getting canal water only in the kharif season because of less storing capacity of the Vanakbori dam, which was constructed in 1958. In 1987, the Kadana dam was constructed across the Mahi river and farmers started getting canal water throughout the year at lower rates. As mentioned earlier, not all farmers of the command area could take advantage of cheap canal water. Only 15 per cent of the area was irrigated. Farmers came to know that their problems could be solved with the efforts of WALMI and working cooperatively.

Environment

Anklav is a subminor canal of the Navakhal minor and starts from the right bank of the Mahi canal of the Borsad branch. Its head reach is in Bhetsi village and ends in the boundary of Anklav village. This canal is situated at the back portion of the Mahi Kadana dam and irrigates Bhetsi, Anklav, and Ambali villages land. Most of the area is plain but in some places land is elevated. The area receives nearly 750-900 mm. rainfall. Wells are mostly perennial. Drainage of the soil is good and hence there is no waterlogging.

Anklav is a big village. There are three village panchayats in Bhetsi, of which two are in proper Bhetsi and the third one at Baria portion of the
village. The Baria portion comes under the command area of the Anklav subminor. Education level is high in Anklav and Bhetasi (main) and low in the Baria portion and Ambali. Bhetasi is situated at the head reach of the canal, Ambali at the middle reach and Anklav at the tail reach. River Mahi passes through Bhetasi.

Majority of farmers in the area are marginal and small. There is large number of landless labourers. Big and rich farmers are found more in Anklav. About ten per cent population of this village is staying abroad.

Big farmers give their land on lease for cultivation to small farmers and landless labourers. Sometimes big farmers themselves cultivate their land with the help of labourers. These farmers have wells in their lands and sell water to other farmers. Land is leased to small farmers at the rate of half-half share, one-fourth share or one-sixth share. In the case of half or one-fourth share, the farmer (small) gives a share in expenditure to the land owner and receives a share of the produce. In the case of one-sixth share, the farmer puts in his labour only and receives one-sixth share of the produce.

Many communities live in this area. Chief among them are Patel, Goswami, Baria, Shah, Muslim, Garasiyah, Vora, weaver (Vankar), Harijan, Vaghari, Thakkar, Bhil, Chamar, and Patanwadi. In Anklav some people have adopted christianity.

Progressive and educated farmers in this area are quick and alert to adopt new farming practices.

Grievances in Irrigation Management

After the construction of the Anklav subminor in 1964-65, the distribution of water and other related works were administered by the staff of the irrigation department. The canal was divided into three divisions (for easy administration) and in each division, one clerk and three or four watchmen were appointed to look after the distribution of
water, maintenance and repairs of canal, collection of water charges, and preparing the progress report.

The first problem the farmers faced was in the procedure for getting water from the canal. The farmer had to fill up a form before the beginning of every season. He mentioned the seasonwise area to be irrigated and the crops to be sown and handed over it to the Talati of Anklav. If by chance, the Talati was not available, farmers had to go back without handing over the form. If the form was submitted late, the farmer had to pay 50 per cent more than normal water charges.

If the farmer took water without filling the form, he had to pay penalty and after the season was over water charges to the Talati. He has to pay service charges even if he failed to get water after filling the form. Because the canal was not permanent, there was seepage of water and accumulation of water in the field. Second, because of the absence of a regulating device at the outlet there was accumulation of water in the fields. This damaged standing crops. This resulted in frequent quarrelling among the farmers. On this canal, there are about 52 outlets, some official and some unofficial. As the canals and field channels were not lined, there was considerable seepage. Absence of regulatory devices at the outlets damaged crops.

In the head reach and middle reach parts, farmers prevented the flow of water by placing obstacle in the canal and diverted water to their fields. As a result, the farmers in the tail reach could not get water. Sometimes police had to be called in to remove the obstructions. The irrigation department staff could not exercise their authority. A retired watchman said that during his working, he found drunkard farmers placing obstacles in the canal. He used to remove the obstacles by hiding himself.

In addition to these malpractices, because of the influence exercised by and corrupt practices of big farmers, small farmers were facing difficulty in getting water. Big farmers could get water easily. Releasing of water from dam was also not satisfactorily done as water was distributed in two
canals. So farmers were unaware of when water would come, in and how much quantity and when the canal would be closed.

The irrigation department staff also faced problems. Many farmers were getting water without applying for it. They were neither paying any penalty nor the water charges. As a result, revenue collection was less than 50 per cent.

In the command area of the canal, there are nearly 40 wells where water is available throughout the year. Farmers grew many types of crops. Well water quite often supplemented canal water in growing different types of crops.

Background of the Society

It was at this time that WALMI entered in this area. This government institution is working on the management of irrigation by involving farmers to distribute water equitably. While discussing with WALMI about their grievances and their solution, the farmers realized that only complaining was of no use but that they had to work together to find out solutions.

WALMI started working on the outlets which were leaking and stopped the leakage. Side by side, it also kept contact with the farmers. An awareness came among the farmers that distribution of water has a joint work. Some farmers suggested that there should be a meeting for an outlet which had problems, while others suggested that it was a question of the whole area. Several group meetings were arranged and as a result, farmers, staff of the irrigation department, and WALMI people came in close contact. WALMI represented to the irrigation department that it would find solutions to the problems of canal and its outlets and decided to involve the farmers in this work.

In a map of Anklav sub-minor farmers were asked to point out the problem areas. According to farmers a complete renovation of the canal was necessary. WALMI provided funds for the renovation of the canal.
The farmers took interest in renovation and improvement of the canal and made necessary changes at each outlet, looking to the rotation of the farmers. They organized a group of farmers and a leader from it for each outlet to represent the grievances of farmers who are under the command area of an outlet. Farmers thought of having a committee for each outlet but this was not practical as there were many outlets. Instead, the farmers decided to organize three cooperative societies having many units. WALMI suggested that it would not be possible to keep coordination and administrative control over each society. As a result, it was decided to have one cooperative society with two tiers, one tier consisting of an unofficial group with sub-groups and the second tier consisting of elected members who can manage the cooperative society.

The responsibilities of the society were as follows:

1. Water is to be purchased on volumetric basis from the irrigation department and is to be sold to members and non-members according to the crop area basis.
2. Water is to be distributed in the command area.
3. Water charges are to be collected from the farmers and paid to the irrigation department.
4. Canal and field channels are to be maintained regularly.
5. Buy a tractor and a thresher and give to members on rental basis. Distribution of fertilizers and pesticides also to be done.

The society faced two difficulties in paying for water on the basis of area irrigated, that too at rates not higher than what the government charged.

1. The society will buy water from the irrigation department at the rate of 30 paise per 10,000 liters.
2. The society will sell water to members according to the area of the crop but not at a rate above that of the government.

After examining water use in previous years, the farmers sent a proposal to the government that they should be charged 14 paise in kharif, 23 paise in rabi and 24 paise in summer for 10,000 liters, instead of 30 paise for
10,000 liters. To support their arguments, they produced figures of present recovery and expenditure after the establishment of the society and then compared with the statement of government recovery and expenditure. They demonstrated to the government that the latter's income would double even if it supplied at the proposed rates. As a result the government revised the rates to 14 paisa in kharif, 21 paisa in rabi, and 30 paisa in summer. In addition to this, government agreed to give Rs. 20,000 per year for the repairing of the canal and other major repair works. Construction would be the responsibility of the irrigation department.

History of the Society

The Sardar Agri Development Irrigation Cooperative Society was established in November 1992 though the charge of canal administration and irrigation distribution was handed over in November 1993 by the irrigation department. During this time the farmers were meeting every month, and the first general body meeting was held on February 21, 1993 in which, members of WALMI were also present.

After taking administrative control of the canal, the society started a membership drive. In the command area of the society, Rs.10 as share and Rs.1 as entrance fee was collected from each landholder for becoming a member of the society. A working committee of 15 members was also formed in this meeting. Since the society takeover of the administrative control of the canal, there has been considerable reduction in the responsibilities of irrigation department. It is left with only two major works: release 32 cusecs water from the subminor head into the canal at every rotation of 168 hours; the volume is to be measured by a watchman, and to look after the repairing work of the canal having more than 1.5 meter break.

Distribution of Water

Though farmers of each outlet were to take water according to rotation which was decided among themselves, this did not work in practice
because the water flow in the canal was not uniform and farmers took more time to irrigate their fields. In addition the society also was not following its rules strictly since it was the beginning. Farmers did not care much for canal water as they has access to perennial wells. In summer when canal water was not available, farmers used well water.

During the rabi season, there were no incidence of water crisis and farmers in the tail reach were able to get water. After the season, the recovery of water charges was nearly 90 per cent. The society paid this amount to the irrigation department in time and received 20 per cent discount (see Table 2).

In summer, requirement of water was more. Some farmers were taking water by obstructing the water flow in the canal. There were quarrels among farmers but solutions were found on the spot. Farmers in the tail reach could not get water but at all during summer. After summer, the society got a grant of Rs. 20,000 from the government for removing grass and silt. After the summer season, the recovery of water charges was 80 per cent. The society earned a profit once more (see Table 2).

No meeting was held in the beginning of the kharif season. Because of rain there was no crisis in distributing water and tail reach farmers were easily getting water. But at the end of the season, farmers in the tail reach could not get water. But the farmers could not find any solution. Some big farmers were able to get water as they were able to get water released from the head reach. Quarrels among farmers took place on this issue. During October a working committee meeting was held in which, for better and smooth administration, different committees were formed. A water committee consisting of seven members was to look after the distribution of water. Another committee was given the responsibility of full recovery of water charges. It was decided in the same meeting to maintain proportional flow of water in the canal because tail reach farmers were not getting water. It was decided tail reach farmers would take water first, then middle reach farmers, and lastly head reach farmers. Finally it was decided that the whole canal will be filled and all farmers could take water at a time.
In the next rotation, however, this decision was not observed because the farmers were unaware of this decision. So they started taking water when it started flowing. But no efforts were made to stop this and implement the decision taken earlier. The society had not informed all the members of the decision. As a result it could not enforce its own decision. After the kharif season was over, the recovery of water charges amounted to only 10 to 15 per cent. The main reason for the shortfall was that there was a difference of opinion among the members regarding the working methods of the society. Secondly, the working committee members had not shown much interest in the management of the society. Hence, not much attention was given to the recovery of water charges.

Benefits to Farmers

After the formation of the society, season, there has been somewhat improvement in water distribution.

* A schedule for water distribution was prepared at WALMI, Anand, by the officers of the irrigation department and one or two leaders of the society.

* Proportional distribution of water was maintained to some extent. In rabi season, the tail reach farmers were getting water but not in kharif and summer.

* Fewer incidence of obstructing the canal water were observed.

* Quarrels among farmers were reduced.

* Owing to efficient use of water, less water was used and more area was covered under irrigation (see Table 1).

* Area under cash crops like banana and some perennial crops increased while that under paddy came down.

* Corrupt practices came down considerably.
* The most important advantage to farmers has been that they do have 
not to go to the talati's office to give an application.

Present Situation

In the first year of its operations, the society has made some progress. In 
the first two seasons (rabi and summer), the society showed good 
performance in management. Farmers were cooperated with the society 
and they were sensible while using water. But slowly they have reverted 
to the old habits. As a result some farmers could not get canal water and 
started using well water. Not only this, they did not bother to report to 
the society about the stopping of water.

Several malpractices by the watchmen and farmers have been reported. 
In many cases, it is reported that the watchmen take bribe. When the 
season is over, the watchman recovers lower water charges from known 
farmers and or does not issue proper receipt, and As a the result society 
earn less profit. Since members of the society are not keeping any watch 
on the watchmen, it becomes easy for the watchmen to indulge in 
malpractices.

A meeting was held on December 25, 1995 at Anklav of officers of 
WALMI, and local leaders of Anklav and Ambali villages. In this 
meeting it was decided to organize a new society of the Navapura sub-
minor canal which is a part of the Navakhal minor canal a little away 
from the sub-minor canal of Anklav. One member of Anklav working 
committee was selected as president of the new society. In the 
surrounding areas farmers started the organizing societies.

Future Planning

At present the society is not doing any other work except looking after 
irrigation. It has however, several plans for the future as under:

- The society is planning to enter rental of farm machinery and 
equipment
- The society has taken up supply of inputs and consumer goods

- The society will propagate knowledge about new agricultural practices

- To work as an agent for taking out life insurance of members, and their crops and animals

- The society plans to market members' produce and

- Supply Credit

- To provide employment to landless labourers and small farmers by taking bidding for contract works related to small or big irrigation works or roads.
<table>
<thead>
<tr>
<th>Season</th>
<th>Before society 1985-'86</th>
<th>After society 1993-'94</th>
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<tr>
<td></td>
<td>Total use of water (D. Cusec)</td>
<td>Total irrigated area (Hect)</td>
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<tr>
<td>Rabi</td>
<td>1110</td>
<td>250.01</td>
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<tr>
<td>Summer</td>
<td>650</td>
<td>164.31</td>
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<tr>
<th>Season</th>
<th>Water charges to be collected from the farmer by the society</th>
<th>Society has to pay to irrigation department</th>
<th>For regular payment 20 per cent discount</th>
<th>Society has to pay net amount to irrigation department</th>
<th>Society receives net profit from water charges</th>
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<tr>
<td>1993-'94</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rabi (winter)</td>
<td>65,000-00</td>
<td>44,004.03</td>
<td>8,800-80</td>
<td>35,203-13</td>
<td>26,402-33</td>
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<tr>
<td>Summer</td>
<td>66,476-00</td>
<td>47,749-41</td>
<td>9,549-88</td>
<td>38,199-53</td>
<td>28,649-65</td>
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<td>1994-'95</td>
<td></td>
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<td>Kharif</td>
<td>41,500-74</td>
<td>22,052-17</td>
<td>4,410-43</td>
<td>17,641-44</td>
<td>13,230-56</td>
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<tr>
<td>Rabi (winter)</td>
<td>65,057-70</td>
<td>44,424-32</td>
<td>8,884-86</td>
<td>35,539-46</td>
<td>26,654-60</td>
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<td>94,937-14</td>
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11
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<th>Crops</th>
<th>Before Society 1984-'85</th>
<th>After Society 1993-'94</th>
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<tbody>
<tr>
<td></td>
<td>Area (Hect)</td>
<td>Percentage of irri. area</td>
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<tr>
<td>Banana</td>
<td>19.04</td>
<td>6.30</td>
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<tr>
<td>Paddy</td>
<td>51.69</td>
<td>17.02</td>
</tr>
<tr>
<td>Tobacco</td>
<td>63.57</td>
<td>20.98</td>
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List of case studies published in local languages under Irrigation Management Transfer Project

Case Studies conducted in Gujarati and published in Gujarati

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

1. Water Users' Association in Phulewadi Lift Irrigation Scheme: Farmers' Experience
2. Water Users' Association in Kadoli Lift Irrigation Scheme: Farmers' Experience
3. Water Users' Association in Minor 7, Mula Project: Farmers' Experience
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

Case Studies conducted in Tamil Nadu and published in Tamil

1. Water Users' Association in XIth Branch Canal, Periyar Vaigai Project: Farmers' Experience
2. Water Users' Association in Kedar Tank: Farmers' Experience
3. Water Users' Association in Dusi Mamandur Tank: 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
7. Water Users' Association in Panchanthangipatti Tank: Farmers' Experience
8. Water Users' Association in Pillayarkulam Tank: Farmers' Experience

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