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Status of Irrigation Management Transfer in India

**Water Users' Association in
Minor 7, Mula Project:
Farmers Experience**

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The members of the study team, including Dilip R. Patil, wish to thank the people of Village Chanda, 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.

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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 Dilip R. Patil 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.

Dilip R. Patil'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 Jeffrey D. Brewer and Shashi Kolavalli.

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Water Users' Association in Minor 7, Mula Project: Farmers' Experience

The Shree Datta Cooperative Water Distribution Society is based in Chanda Village, Newasa Taluk, Ahmednagar District, Maharashtra. The location is historic. Chhatrapati Shivaji had stayed here for some time. During the freedom struggle, Nana Patil, the "Lion of the Revolution" remained underground in this area. The village was once called Chandanpur or Chandrapur. But during the times of the British and the Chanded dynasty, it assumed the name of Chanda.

The village population does not exceed 10,000. Marathas and Malis dominate in the village population; backward caste people also live happily in the village. The village is advanced, all facilities are available here. It is well connected with Ahmednagar and Shirampur by the state transport service.

Farming Before the Mula Project

Farming is the major occupation of the more than 60 percent of the villagers. In the past farming was dependent on rains. The village has 2500 hectares of fertile land, mostly deep and medium black soil. The annual rainfall in the region is between 250-500 mm. The farmers could get enough bajra and jowar for their needs in kharif with just three good rains. In winter, the farmers grew gram. Some well owners could grow wheat, fodder, etc. Water shortage in summer was common not only in Chanda but also in Ahmednagar district.

The Mula Dam Project

To solve the problems of water shortage, the government built the Mula scheme. An earthen dam was constructed at Baregaon-Nandur near Rahuri. The storage capacity of the dam is 26,000 million cubic meters of water. The water is first given for drinking and industries in Ahmednagar City and the remaining water is used for irrigation.

Water is supplied for irrigation through the Left and Right Bank Canals. The southern part of Rahuri and Newasa Taluks and the Northern part of Shevgaon and Pathardi Taluks come under the Mula Right Canal. A total of 80,810 hectares are to be irrigated under the Right Bank Canal. According to government policy, sugarcane cultivation is allowed in only four percent of the command area. Actually, however, sugarcane cultivation is found in forty per cent of the command. This growth in sugarcane cultivation is due to sugar factories at Rahuri, Sonai, Bhenda and Kasar Pimpalgaon.

Mula Right Bank Canal and Minor No. 7

The Mula Right Bank Canal is an earthen canal. Minor No. 7 is located at 42 kilometers from the head of this canal. Thirty percent of Chanda area comes under this minor. The minor has a length of 2.25 kilometers with thirteen outlets; 361 out of 500 hectares of land is irrigated by these 13 outlets. The minor is one kilometer from Chanda Village and traverses the village lands of Chanda and Rastapur. In the minor command area, deep black and medium black soils dominate. Low quality white soil is rare.

Water first flowed in Mula Right Bank Canal in 1971-72 raising the expectations of the farmers. Natural percolation of water increased, raising the water table in the soil. The state does not charge for use of groundwater. Farmers gradually dug their own wells. Where there were 20 to 22 wells in the command area, there are now 183 wells.

According to government policy, sugarcane is allowed on only four percent of the command area. However, seventy to eighty percent of the command area was planted with sugarcane using groundwater. Because of the abundance of water other seasonal crops also grew abundantly. There was groundnut in summer followed by kharif maize cultivation along with sugarcane and fodder. In short the standard of living improved because of the sugarcane, increased grain crops, milk production, etc.

Though these were very good things, some problems also arose. Gradually the water distribution system became less efficient and less equitable. Big land owners, and those with political connections started taking more than their share. Giving to the government patkari was an easy way to get water without application. The common farmer was deprived of his justifiable rights. There was no order for water distribution. The tail end farmers always had to face conflicts, unequal water distribution, unfair practices, etc. These problems led to an extremely quarrelsome situation leading to hot discussion and physical assaults. People used water thoughtlessly and ignored the wastage of water. There was no assurance of getting water after applying for it; while to apply for it meant traveling to Ghodegaon, seven kilometers away.

Impermeable deep and medium black soil was used for sugarcane again and again which lowered soil fertility. Too much water was supplied to sugarcane, creating salinity problems. Sixty to seventy hectares of land within the command area became barren. Sixty percent of the wells in the area now have undrinkable water.

All of these problems were caused because people had no regulation over the life giving water.

The First Experimental Cooperative Water Distribution Society

Everybody understood the problems but did not have the solutions. The contribution that the farmer could make in water management was not understood.

SOPPECOM (Society for Promoting Participative Ecosystem Management), a non-governmental organization based in Pune, accepted the responsibility of helping the farmers to form a water distribution society. For this effort, SOPPECOM had help from the Central and Maharashtra governments. SOPPECOM was formed in 1991 as an offshoot of the Centre for Applied Systems Analysis in Development.

This organization had a great experience of water management and other factors related with water.

Due to inspiration from SOPPECOM, many cooperative water distribution societies are coming up. The organization has provides great help in preparing a contract with the government, deciding the quota of water, preparing bylaws for the society and training farmers in running of the society.

The first water distribution society that came into existence with help of SOPPECOM was the **Shree Datta Cooperative Water Distribution Society** on Mula Minor 7 at Chanda.

During kharif 1986, farmers needed water for their bajra crop because of the delayed rains. One of the farmers from Chanda, Shri Govindrao Shete went to Ghodegaon Irrigation Office to apply for water. SOPPECOM representatives were then discussing with irrigation department officials about improving water distribution. Shri Shete also participated in the discussion. Shri Shete had been a builder once and had been in politics for a long period. He had influence in Chanda Village. He had confidence in other farmers, so he resolved to form a water distribution society on Minor 7.

However, implementation could not be done by a single man alone. The job required convincing others of the importance of the society. Others needed explanations. SOPPECOM offered to help.

The First Meeting

There is a Hanuman temple near the tail end of the minor. There the farmers had a meeting in February 1987. 120 out of 400 beneficiaries were present. SOPPECOM representative explained the importance of water user society. As everybody was familiar with cooperatives, they decided to found a cooperative water distribution society. A promoting body containing eleven members was elected. One farmer led a group opposed this action, but ex Zilla Parishad member, Shri Buvasaheb

Dahatonde, explained the purpose to them so they ceased their opposition. All present decided to work together without bringing in politics.

Four organize from SOPPECOM came to stay at Chanda. Along with the promoters, they started meeting the farmers. On the weekly market day, at marriage ceremonies, and elsewhere, they held meetings. At these meetings, the farmers expressed extreme displeasure about water distribution. The farmers brought up their doubts. Somebody had collected funds for erection of the statue of Shivaji Maharaj in the past. The amount and the statue both had vanished strangely. The farmers didn't want the same experience again. The organizers explained to the farmers the adjustments in the cooperative law. The farmers were clearly told that they get a receipt for the share deposit they pay. The amount would be deposited in the bank in a separate account in the name of the Chief Promoter. The amount could not be withdrawn unless all the members give consent. Some farmers expressed the worry that the promoter body would use extra water without paying. They were told that could take action against those who disobey the rules. Some were afraid of extra water tax by the society. They would have to pay Rs 25 per hectare to the society as service charge, but equal distribution of water, assurance of water, assurance of water availability were certainly more beneficial than illegal payment to the government Patkari. The farmers were made aware of the lasting benefits from the society, including: freedom of crop choice, ability to demand water, and the power to solve their problems together.

Confidence grew among the farmers about their rights over water through the society. They were sure that the society would help them put their problems to the government influentially. They realized that they should come forward to help themselves.

The promoters started collecting share amount with help of the organizers. An amount of Rs 25 for thirty seven gunthas of land was suggested by the SOPPECOM. The amount was collected accordingly.

Foundation of the Society

The first important step in the foundation of any society is the registration. A cash amount representing 114 farmer shares was credited in the bank account under the name of the Promoter. An application for registration was sent in February 1987 to the Assistant Registrar of Cooperative Societies along with the list of shareholder members. All necessary documents were furnished.

But the Cooperative Department demanded a certificate from electricity board despite the society getting water from the canal rather than by lifting it. As it was a new experiment in Maharashtra, the Cooperative Department officers were not aware of the procedures and the documents. However, the society finally received its registration certificate after two years.

The Memorandum of Understanding

The second important stage in the process was signing the Memorandum of Understanding (MOU) with the Irrigation Department. According to the MOU, the society was given the responsibility of maintaining and repairing Minor 7 along with responsibility for water distribution in the command area. The Irrigation Department accepted the responsibility of supplying water on a volumetric basis at the head of Minor 7. During preceding ten years, maximum water had been used in the command area during 1982-83. Based on that amount, the annual quota for the society was fixed at 1775 thousand cubic meters.

There was a joint inspection of the minor by the Promoters, SOPPECOM representatives and Irrigation officers. The Irrigation Department promised to deal with the identified repairs.

The promoters decided to take charge of the channel without waiting for the completion of the repair works. The channel was thus handed over by the Irrigation Department for kharif of 1989.

Meeting After Registration

The first general body meeting after registration was held on 16th March 1989. Thirty-five to 40 beneficiaries were present. An eleven member executive committee was unanimously sanctioned in the meeting. Eight out of these eleven members were owners of more than two hectares of land apiece. There was only one member having less than one hectare of land. The Chairman, Vice Chairman and the Chief Promoter were given signing authority for bank transactions. The society appointed two patkaris and one Secretary for daily work.

Water Distribution System

The society undertook responsibility for water distribution with the objectives of giving water to the farmers in command area justly and to serve their needs. Kharif season was the auspicious beginning for the society work. It was very necessary to fix a work system for the water distribution. There was a special meeting of all society members on 17th June 1989. Fifty members were present. A SOPPECOM representative suggested following a warabandi - a water time table prepared by the Irrigation Department. The meeting agreed unanimously. The society would issue a notice for applying for water fifteen days before the season. It was agreed that each farmer should apply for water within ten days of the notice. The water distribution time table would be prepared according to the demand of the water. The time considered necessary for each hectare of land was ten hours. Water distribution was to be done from tail end to the head.

The society patkaris and the Secretary were trained in managing the society by SOPPECOM representatives. The training included collecting applications for water, fixing hours for water, preparing a time table, calculating irrigated land by water used, maintaining the daily register, handling monetary transactions, etc. The Water and Land Management Institute (WALMI), Aurangabad, trained both patkaris for four days on water conservation methods, crop water requirements during the crop growth period, water distribution, etc. The WALMI also trained the

committee members and the Secretary for two days about the working of a cooperative society.

The members and patkari had gotten some practical experience in 1988-89. The society was expected to start its work this year but could not as the registration letter was not received. The farmer's will and enthusiasm was tested during this period. The Promoters learned water distribution with help of Irrigation Department officers and SOPPECOM. They keenly observed the water distribution during all three seasons. They realized flaws in water distribution and came to know the problems of water distribution. This experience was very valuable.

From kharif 1989, the society took over water distribution. As decided, water was distributed by warabandi. The time table was prepared based on allocating ten hours per hectare for the applications received. Practical implementation proved that it required more than ten hours for one hectare of land. Therefore, beginning in 1990, time span was changed to twelve hours per hectare during the year. However, this is still not enough, for many reasons, including: carelessness on the farmer's part, tendency to supply extra water to sugarcane, unsteady flow of water due to the defects in the channel, extraordinary length of some channels (up to one kilometer), percolation from unlined channels, and problems with black cotton soils. All these reasons made it impossible to supply water according to a strict warabandi schedule. From 1991-92 onwards, the distribution schedule was prepared without specifying the times. It was a "Turn Table" convenient for water distribution.

A different problem came up in 1992-93. Demand applications were not received before the season or before the rotation. Farmers gave applications at their convenience after the rotation started. Only thirty percent of the applications were received in time. It was impossible to prepare a proper schedule although water distribution was started for the applications received.

The society got cooperation and guidance from SOPPECOM up to the end of 1991. When the society started handling its responsibilities independently, SOPPECOM withdrew.

More than sixty percent of the population of Chanda Village reside at their farms. So most come to the marketplace for an hour or so each market day. Here they get information about the water distribution. The society needs no special means of notification. They do not need to have a monthly meeting of the society committee members in the office, because they all meet at the bazaar. Here they give and take information about the working of the society. As other members are busy in farming and other jobs, the important decisions about the society are taken by the Chief Promoter of the society. The decisions are implemented by the employees.

On market day, the Irrigation Canal Inspector comes for his purchases, as well as for tax collection. He visits the society office and from him people came to know the changes, if any, in the Irrigation Department's water distribution schedule. The society reports about the demand to him orally. The Society's contact with the Subdivisional office is established through the same Canal Inspector. On important matters the society contacts the main office at Ahmednagar. The main office conveys the water time table before the season by a letter to the society. But practically, there are changes not only in time table but also in the dates for beginning and ending the seasons.

Water Demand Application

In the past, the Irrigation Department would issue a notice and the farmer had to apply for water for the whole season. The application was sanctioned by the Subdivisional Officer. Then it was the department's responsibility to supply water throughout the season. This programme had no flexibility and the farmers were charged even if they took no water.

Now, the farmers give their applications to the Society office in the village itself. The Society fills out an application for water and supplies water to

the farmers throughout the season. For extra water the farmers have to pay cash with a special application. For sugarcane, the farmer has to give a demand application before each rotation starts.

This system has brought flexibility in water distribution. Water tax has to be paid only by those who avail water. The farmer who applies for water is now certain to get it.

Water demand applications are filled in by Society clerks. They are in the society office from eight o'clock in the morning to four in the afternoon.

Freedom of Crop Choice

According to government policy, sugarcane is permitted only in four percent of the command area. But sugarcane was planted in up to eighty percent of the area, as there were many wells. The farmers who did not have wells did not think of sugarcane cultivation. The wells have water during kharif and rabi, but in summer they have much less. The acute need of water in the summer compelled farmers to bribe canal staff for a water supply. The common farmer couldn't get water because he lacked ready cash.

The Society gave farmers freedom to use the canal water on sugar as well as other crops within the command area. Water was assured. During the same rotation they had assurance of having water twice or thrice, so the farmers without wells also started cultivation of sugarcane. The society was benefitted by the demand for water for sugarcane. The great water demand for sugarcane during the summer and the resulting collection of water tax added to Society income. The Society tries to save water from the rabi quota of 1058 thousand cubic meters. This saved water is be available during the summer after deduction of 30% for evaporation losses. The Society saved 488 thousand cubic meters of water during this season.

Wheat sowing went on from October to December during Rabi this year. Each farmer's need was naturally different. The situation was same for

other crops, so the farmers applied for water after the canal rotation started. However, they could submit water applications in the village itself rather than at the Irrigation Department office.

Water Distribution During Rabi Season 1994-95

This rabi season had four rotations. During the first rotation 86.8 mm of rain fell in the command area. The farmers did not take canal water. During the second rotation, very few farmers used canal water as there was 55.00 mm of rain and the wells had a lot of water. According to records, the Society utilized only 10.08 cusecs of water and irrigated 14.40 hectares of land. During next two rotations more water was used. The canal's third rotation was from 1st December 1994 to 7th January 1995. The society supplied water to the farmers in three turns during this period.

The role of the patkari in the success of water distribution by the Society is very important. One of the patkaris of the society had studied to eleventh standard and had worked previously on water distribution and tax collection for a Canal Inspector. This patkari knew every detail of the channel command area. Previous experience of water distribution and the training received from SOPPECOM and WALMI has enabled the patkaris to distribute water easily according to the demand without formal instructions.

There is a gauge point in the main canal near the head of the Minor 7. The gaugeman there opens the channel at the request of the Society patkari at 8 o'clock in the morning. After opening the channel, water distribution decisions are taken by the patkaris.

The outlets that have higher total demand are to be opened first. After that, step by step the water distribution is completed by opening other outlets. This is the unwritten rule. The sugarcane crop is supplied water during night time. Sugar cultivation is organized by the block method. Each outlet is looked after by the Society; the keys are kept with the patkaris.

In rabi 1994-95, when water appeared in the main canal, the Chief Promoter ordered the opening of the channel to irrigate the maximum land with minimum water. He insisted on saving water in rabi so they could use more water during the summer.

The Society's third rotation ran from 3rd to 23rd December 1994. The society supplied water as per the received applications for seasonal crops. This time the patkari opened these five outlets which had more demands on it. After opening they were again locked. According to the applications the patkari supplied water by opening the outlets at the middle or at the tail end. The farmers were not taking water at night. For wheat, they did not want water at night, but came to the patkari the next morning for water. It created problems in water distribution. But the members were interrelated and so were given water. The patkaris had the channel closed by the gaugeman on 23rd December.

The Canal Inspector visited the society office after the rotation. He got a note signed by the Society Secretary or a patkari. Those members who took water were asked to sign a note specifying their irrigated area and the crop. During this rotation, the Society used 85 day-cusecs of water to irrigate 87 hectares of land.

On the day after closing the channel, an electric pump owned by a tail end farmer went out of order, endangering his sugarcane cultivation. He got the channel opened by convincing the Chairman and patkari of his need and completed his sugarcane watering.

The next two Society rotations were for extra water. After receiving eight to ten applications the channel was again reopened on 27th December. Water distribution was arranged according to the applications for extra water. The rotation went on until 29th December.

The Society patkari and Chief Promoter told the farmers that the channel would not be opened again as they had to save water for summer. Many farmers had a need for water but they did not apply for water because they came to know that the channel was not supposed to be opened. But

when the Society clerk received some water demand applications, he asked the gaugeman to open the channel and gave the message to the patkari. Only a very small flow was permitted into the channel so that only four or five farmers got water.

Water deliveries on Mula Right Bank Canal abruptly ended on 7th January 1995. Nobody from the Society knew about the canal closure. Naturally some farmers got three turns and the others got only one. Some did not get any. Those who needed water but didn't apply were very nervous. The farmers feel that the water should be shut off only when all have Benefitted.

On 9th January, 1995, the Society Secretary installed water stage recorders at the four ends of the minor. Previously, water levels had been measured by the gauge pots at the four ends. The Irrigation Department's gaugeman used to note the water levels at 6 AM and at 6 PM each day. Nobody from the Society kept track of the gauge.

Every rule has exceptions. Some cases of applying for water for smaller areas than were irrigated were found. Though the patkari supervises the water distribution, there is no mechanism to catch such cases. The general body meeting in 1989 resolved to penalize those who avail water illegally or waste the water. During this season no such action was taken.

Results

During the period of water distribution there were no conflicts among the farmers. Everyone who applied got water. Three Society rotations could be completed within a single canal rotation. That gave enough water for the seasonal crops. This has improved incomes by ten percent. Yields of sugarcane, however, are falling; they now average 35 to 40 tons per acre.

Wastage of water has decreased because of the Society. Water is now given as per the demand and the need. There is no unirrigated land in the command area now. The earlier dry land is producing sugarcane now.

Farmers got permission to lift water from the minor from the Society. Five of the farmers took advantage of this permission during this rabi season.

Overall, the society took water from the third and fourth rotations of the canal and irrigated 259 hectares of land utilizing 233 day-cusecs of water.

Maintenance of Channels and Field Channels

The Irrigation Department gives the Society Rs 10,000 for channel repairs every year. According to the MOU, they get Rs 20 per hectare. In 1994, the society received the amount from the Irrigation Department. The minor channel was cleaned in January 1995. The laborers were from the command area and they were paid Rs 35 per day. The pebbles, grass growth and rubbish were removed from the channel. As per WALMI training, the channel was cleared by the box method to the full supply level. Formerly it grew in width as it was cleaned. The Society spent Rs 1200 for this work.

Earlier, channel maintenance was the farmers' responsibility, but it was not done in time. In the 1991-92 annual meeting, the maintenance responsibility was taken up by the Society. The Society carries out maintenance according to the needs.

Field channels irrigating large areas are given preference for repairs and maintenance, and are totally repaired. Other channels are repaired when and where needed. These repairs are done before rabi and summer seasons. The decisions about the maintenance needed are taken by the Chief Promoter. The Society saves money by making casual repairs of channels that irrigate less land. Farmers owning land under these channels complain of partiality.

The service road along the minor channel was in very bad condition. The sugarcane transportation in the command area and outside is done along this same road. The society asked for the help from the sugar factories of Bhenda and Mula. Funds were collected from passing vehicle owners.

The Society added Rs.15,800 from its own funds and spent Rs 20,000 to Rs 22,000 to repair this two kilometer road.

Water Charges

The Society originally imposed water charges for the seasonal crops according to the charges and rules of Irrigation Department depending on the irrigated area. In a special meeting in 1989, it was decided to charge Rs 125 per hectare of sugarcane for one rotation of water in kharif. For rabi, it was Rs 187 per hectare for one rotation and for summer it was Rs 375 per hectare for a single rotation of water. In the annual meeting of 1991, it was decided to reduce the rates to Rs 150 in kharif, Rs 250 in rabi and summer for one rotation for one hectare of sugarcane. In 1994-95, water charges were the same.

In addition to the above, a service charge of Rs 25 per hectare is imposed every season. According to the resolution in the 1994 general body meeting, Rs 25 is to be charged per hectare every year for channel maintenance. For sugarcane crop, Rs 25 is charged each season. During the 1994-95 rabi season, Rs 100 per hectare was charged for each extra water rotation. For sugarcane this rate was Rs 250 per hectare for each extra watering.

The Irrigation Department Canal Inspector prepared a bill for the total water used during kharif 1994. The bill was to be paid to the department before February. Extra water in the dam was discharged through canals during the kharif this year. This water was used by the Society so the Chairman and the Chief Promoter met the Executive Engineer and requested him not to charge for that water. This was agreed by the Irrigation Department. The Society was given a concession of 74 day-cusecs of water worth Rs 3428. Besides, the Society got 5% reduction for paying the bill on time because the bill was paid before February.

The Society also showed its efficiency by paying the bill for 1994-95 rabi season before it was due; i.e. in the month of March 1995 instead of in May. The rabi season charge was Rs 30 per thousand cubic meters; the

total bill was Rs 16,242. Twenty percent local fund was included in this bill. Twenty percent of the total bill was given back to the Society as financial help. In addition, the Society received a five percent reduction for paying the bill on time. During last five years, the Society has regularly received this five percent reduction in the bills for all three seasons.

Dues Problems

Before the Society was formed, the Irrigation Department had a great problem of collection of dues. Also, low level employees would take money directly for water. Foundation of the water distribution society solved these problems. The Society has paid all its bills and illegal water selling has completely stopped.

Now the Society, instead of the Irrigation Department, is facing the problem of dues. In April 1995, the Society was owed approximately Rs 150,000. Each season's water charges are collected before the following season. Now almost all farmers claim that they are unable to pay the charges. Efforts were made to collect the tax before 1994-95 rabi and 1995 summer season. Society clerks handle water charge collection. The farmers whom the Society was confident that they would pay were offered water by taking their water demand applications. But those whom the Society thought would not pay the dues in time were not allowed to submit water demands unless they paid at least part of the last dues. During the 1995 summer season first rotation, one farmer took water without completing the formalities. The patkari closed the outlet, locked it and asked the farmer to go to the Society office. He owed a big amount for water charges. He was allowed water after paying a part of it. Other farmers were allowed water after the Chief Promoter gave assurances of payment on their behalf.

The Society collects cash amounts due for the extra water, so that the water tax can be paid to the Irrigation Department on time. Extra water is not given unless the water charge is paid along with the application. Sometimes a farmer cannot afford to pay for the extra water needed. So

the farmers sometimes comment that it was the Irrigation Department rule in the past and now it is rich farmer's rule.

Society Finances

The Society's chief income source is the water charge collected from the farmers. During 1994 kharif, the Society paid Rs 9855 to the Irrigation Department as water tax. The farmers were charged Rs 32,732, but some did not pay so that the Society's net revenue was Rs 16,242.

Except in 1993-94, the Society has had considerable income during all financial years. During 1993-94, the Society spent Rs 12,500 for channel maintenance, Rs 9525 for field channel maintenance, and Rs 15,925 for channel service road repairs. With all of these expenses, the Society had to bear a loss of Rs 1455.

The Society has other income sources: the sale of seeds and giving agricultural equipment on hire. These efforts were started by the Society in 1990. The Society has three grass cutting machines, two sowing machines, one groundnut cracker machine, and one sugarcane cultivator. This equipment is given on hire at the rate of Rs. 15 per day. In 1994, the Society earned Rs 855 from this. In 1994 kharif, the Society earned the profit Rs 5200 by selling bajra seed. These activities have been very beneficial to the farmers.

Another source of income for the Society is bank interest. The Society deposits some funds as fixed deposits. In 1994, the Society received Rs 4024 as the interest on these deposits. In 1995, the Society has deposited Rs 15000 as fixed deposit. After maturity, this sum will be used to purchase bajra seed for kharif.

Another income source for the Society is surcharge on late payments. The Society charges ten percent surcharge on the late payments of water charges. In 1994, the Society collected Rs 4320 this way.

A government grant is an additional income source for the Society. After its foundation, the Society received a management grant during the first two years at Rs 75 per hectare. Now it receives Rs 10,000 each year for channel maintenance. This is figured at the rate of Rs 20 per hectare.

Besides these sources, the Society gets five percent concession in the government water charges if they are paid in time. Also, twenty percent of the total bill is given as financial help to the Society.

The first expenditure for the Society is the government water charges. The Society had to pay Rs 50,329 for the water charges during 1993-94. The second item is the salary of the employees. The Society pays Rs 1000 per month to the Secretary, Rs 700 per month to each patkari, Rs 600 per month to the clerk. This expenditure came to Rs 26,800 during 1993-94. In addition, the Society paid Rs 3000 (Rs 250 per month) for office rent, donated Rs 1000 to poor students of the primary school, spent Rs 2036 on stationery, and spent Rs 9113 on travelling. Minor channel maintenance cost Rs 12,500, field channel repairs maintenance Rs 9525, and channel road repairs cost Rs 15,925. Finally, the Society spent some amount on the annual report and other printing. This list covers the usual expenditures every year.

The Society's accounts are handled by the Secretary. The Secretary is employed part time, and, as his salary is low, he performs his Society duties during leisure time. The employees complain that they do not have any job security under the Cooperative Society Act.

Problems Set Forth by the Society

The Administrator, Mula CADA, called a meeting in his office on 27th September 1994 to discuss the problems of the Society. The Chairman and the Chief Promoter of the Society both explained the problems clearly. Problems mentioned included: in 1989 there was a joint inspection of the minor, but the promised channel repairs had not yet been done; Right Outlet No. 1 goes through undulating land and does not carry its design discharge; and molds were not available for cleaning field channels. The

authorities were requested to resurvey the total channel command. The Administrator instructed the officers to solve the problems at the earliest. In fact no action had been taken solved up to the end of April 1995.

The Society spokesmen also presented other points at the meeting with the CADA Administrator. The most important point was a request that the time table for water deliveries should be conveyed to the Society as quickly as possible. Also, the Society should have a share in the decisions of main canal water distribution and that water saved during rabi should be allowed for summer use at summer rates after deducting thirty percent for losses. In addition, the Society asked that fifty percent concession in water charges should be given to help the Society become self sufficient financially. Also, they suggested that at least 50% of the lengths of the field channels should be lined. Finally, they asked that a place for the Society office should be given near the head of the minor channel. These same points were again put forward when Maharashtra Secretary of Irrigation visited the Society on 11th January 1995.

There is another major problem with part of the command. Land irrigated by Left Outlet No. 3 of the minor channel consists of deep black soil; this land had become waterlogged. The length of this field channel was 2.75 kilometers. But nearly two kilometers of the field channel is now non existent, destroyed by the farmers. There is no waterlogged land now and the farmers are growing sugarcane there. However, the farmers in this area who do not have wells expect the Society to provide water to them. Seventy one acres has no source of irrigation water. Other farmers oppose remaking the field channels because their wells have ample water. The deep black soil is a problem for flowing water. The farmers are afraid of the land becoming waterlogged as before. The channel has a great length and has to irrigate 32 hectares of land. The Irrigation Department proposed a subminor channel for this area. The necessary land has been acquired from the farmers, but no further progress has been made. If a lined subminor were installed, the farmers would not oppose it.

Relations With the Irrigation Department

Society matters are dealt with by a Canal Inspector from the Irrigation Subdivision Office at Ghodegaon. The Society Secretary or the clerk go to the Subdivisional office only to pay water charges. The Canal Inspector comes to the Society office to note the gauge readings to prepare the seasonal water bills. Only at the time of these visits do they go to the tail end of the channel.

Many higher officials and honorable persons have visited this Society, including persons from many regions, states, and countries. At such times the Society expresses its displeasure about the Irrigation Department and about the work and cooperation of the responsible officers. Naturally, the Irrigation Officers are unenthusiastic about the Society and they do not put effort into the repairs and other works for the Society.

Sometimes cooperation is extended. Twenty nine farmers from Chanda visited agriculture exhibition at Delhi in March 1995 along with the Chief Promoter of the Society. The visit was arranged by CADA, Ahmednagar.

Negative Feelings of Some Farmers

There are some negative feelings about the Society. The Society has 203 members. But there are 400 farmers in the command area. Many farmers have not become members as they have their own wells in their fields. Others could not become members because there was no field channel reaching their land. Nonmembers who get water from the canal, have to pay thirty percent extra water charges. They think that this is unjust. The nonmembers do not have a share in the planning of the various schemes of the Society. The Society strives to get their cooperation.

There have been no elections in the Society since its founding. According to the bylaws, the Society should elect its office bearers every five years. There is possibility of an election in 1995. Many honorable persons, and higher government officers have visited Chanda because of the Society. Accordingly, many farmers feel that the same committee should be elected

unopposed in order to run the Society smoothly. But another group wants to bring a change by having systematic elections.

Many members think that the present water rates are too high. They say, "These heavy water charges can be paid by the rich farmers. What about common ones?"

Indiscipline and irregularity has been observed in things like submitting water applications on time, completing sowing on time, and payment of water charges on time. Water distribution planning collapses because of farmers applying for water at their own convenience, avoiding water charges payments, etc. Earlier, the farmers had to run after the government patkari to get water. Now the Society patkari has to run after the farmers. Many farmers have not developed intimate feelings about the channel and so are indifferent to it.

Future Plans of the Society

The Society plans to build an office at the head of the minor channel. A request to rent five gunthas of land has been put before the Irrigation Department for this purpose. Dividends owed to the members and Society profits are being collected for the building fund.

Another scheme proposed by the Society was to build a water storage tank. There is a nulla near the head of channel. Stream water collects there naturally. The Society is thinking of building a proper tank to store extra water from kharif and rabi and to use it afterwards. Attempts to get permission for this scheme were pursued up to the Minister. But the Irrigation Department expressed the opinion that the tank might endanger the main canal and therefore the scheme was turned down.

Many farmers expressed the opinion that there is a need to construct checkdams or percolation ponds at places. Farmers do not take water during night time. The same water if discharged into percolation ponds would help the wells. It would also be convenient for cattle. All the

farmers in the command area would be benefitted. The farmers would voluntarily offer land for such ponds if they realized their importance.

One more scheme was proposed by the Society: plantation of 150 to 200 tamarind trees on both sides of the two kilometer long minor. After 7-8 years, each tree would fetch Rs 1000 per annum by sale of tamarind. The total annual income might reach more than one lakh rupees. It would be enough to pay the government water charges and would cover the Society's expenses. However, because of many practical difficulties this scheme could not be implemented.

Conclusion

The very first water distribution society in Maharashtra is carrying on and prevailing over its problems. Farmers in the neighborhood are looking toward this society for guidance.

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

Case Studies conducted in Gujarat and published in Gujarati

1. **Water Users' Association in Ankav 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**
4. **Water Users' Association in Parunde Minor Irrigation 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
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
7. Water Users' Association in Panchanhangipatti Tank: Farmers' Experience
8. Water Users' Association in Pillayarkulam Tank: Farmers' Experience
9. Water Users' Association in Vagaikulam Tank, North Kodaimelalagian Channel, Tambraparani Project: Farmers' Experience

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