

***Actions &
Reflections Series***

(WTR- 2)

MOHANI MAY FAIL AGAIN?

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MOHANI MAY FAIL AGAIN

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Mohani in the command area of Ukai project in Surat district, is the most well-known, almost a legendary Water Users Association (WUA) in the form of an irrigation cooperative society. For 10 years after it started in 1978 it had earned a reputation as a very efficient irrigation society. However thereafter it had started defaulting in its obligation to make payment to Irrigation Department for the water charges and its reputation came under suspicion and attack. When details were looked into, it was found that the fault was not mainly of the irrigation cooperative society but rather of Irrigation Department which had almost a free ride as it expected the society to collect Government's water charges and maintain field channels without any compensatory incentive provided by the Irrigation Department. The State Government policy at that time compelled the irrigation cooperative to charge water rate no higher than Government rate and was supplied water by the Irrigation Department at a rate which left no margin for the society to cover its administrative cost. Most of the societies closed down after 3 years period when the subsidy for administration was over. Surprisingly Mohani did not receive any such subsidy and yet it continued to grow from strength to strength during the first 10 years, earning well deserved reputation not only in Gujarat but throughout India. The Government of Gujarat decided that such societies should be compensated retrospectively for its services according to the provision in the participatory irrigation scheme that was launched in 1995. Orders to this effect were issued on 15.12.97 applicable to Mohani and other irrigation cooperatives that had suffered on account of the earlier policy of the State Government.

Considering these issues the High Level Working Group on Participatory Irrigation

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Management that met on 16th April 1999, decided that it would be useful to know how the performance of earlier irrigation cooperative improved on account of such assistance. The High Level Working Group desired that Development Support Centre (DSC) may make a case study of Mohani irrigation cooperative which was the most well-known and talked of irrigation cooperative of Gujarat. A team of Programme staff of DSC (Pankaj, Pinakin, Prakash Joshi and Bhavesh R Patil) visited Mohani several times and collected information from office bearers, farmers of Mohani and also from concerned engineers about what exactly was happening in Mohani. What DSC learnt is presented by Pankaj Kumar in the paper - Mohani Water Cooperative Society - A Case Study.

It appears that Mohani would have got into trouble even if the Government policies were more supportive to Water Users Association. The case study clearly brings out :

1) Inherent Weakness

There is inherent weakness in the management of Mohani irrigation cooperative which was first able to survive and make some progress under able leadership of the first chairman who led the society for first 10 years. But society never developed broad based leadership, particularly of the office bearers of the Executive Committee, which would plan and enforce discipline on the part of members by setting examples themselves with respect to maintenance of field channels and payment of water charges. It was not realised by the leaders and members that the irrigation cooperative has to be financially viable. The finances of the irrigation cooperative would have gone into red even with incentives, on account of rising administrative expenditure which during 1997-98 was 38% of the total expenditure of the society and salary component of the administrative expenditure was 60% !

Interestingly the manager of the irrigation cooperative who is serving it from the beginning, cites a letter from the Irrigation Department to the society which indicated a staffing pattern and a salary structure, which was not intended to be mandatory but only suggestive. However the manager has so entrenched himself in the society's management that he considers himself as a nominee of the Government and goes on revising his salary along with revision of pay scale of Government servants ! The president or the executive committee have not thought it appropriate, perhaps have not dared, to question and challenge the interpretation of the manager. At Rs 6400 per month (approximately), manager Shri Himmat Singh Raj must be the highest paid secretary of a canal irrigation cooperative in the country.

2) Failure of Irrigation Department

There is also failure on the part of Irrigation Department that after promoting and pampering for sometime the irrigation society of Mohani, it has not looked closer in to the management, to clearly understand the implications of the trends of rising administrative expenditure which ultimately led to stoppage of society's obligation to pay the water charges to the Government ! At no stage did the Irrigation Department try to find out how such a renowned cooperative irrigation society was failing in its important responsibility of paying the dues of the Government.

While providing the package for the revival of defunct societies through retrospective application of incentives, the Government orders clearly emphasized that

Superintending Engineer who was given authority to sanction the incentives to such societies, was enjoined to satisfy himself that the society' s management was sound and if incentives are provided retrospectively. The society would be viable financially and managerially. It appears that this was not done in the case of Mohani and payment of Rs.6.42 lacs was made as if it was Government' s one sided obligation. Of course this payment contributed to realizing arrears of water charges of Rs.3.71 lacs. Same might have happened in case of other older societies and therefore if they are suffering from tendencies similar to what Mohani is experiencing, they would also slide towards failure.

The case study also draws attention towards violation of another Participatory Irrigation Management (PIM) rule as laid down in Government Order dated: 22-11-95 about Memorandum of Understanding (MOU) to be executed at the time of turnover the canals to Water Users Association (WUA). The order clearly mentions that system be rehabilitated, before transferring its management to WUAs. In case of defunct societies, the same rule should apply. The systems should be rehabilitated with society' s necessary contribution, before MOU is signed. Only then, it should be **re-transferred** along with retrospective incentive to the society. When this rule is not observed, the implementation of current PIM policy gets flawed. The society after obtaining the rebate is not bothered to improve the system. Nor is the Irrigation Department showing concern.

It has also been found that Irrigation department may not have funds required for rehabilitation. In such case, at least small part of the work should be carried out with

society ' s contribution and the remaining works should be mentioned in agreement along with conditions for complete rehabilitation and community' s contribution for it .

Even in the areas where Irrigation Department has its strengths i.e. in technical matters, the department has not monitored what is happening to the systems in terms of maintenance of the water courses and the field channels. In fact it should have gone beyond this function to look into the efficiency in the use of water. The case study highlights that the system has been deteriorating over years in its physical condition and capacity to carry water. The result is excessive water in some parts of the canal and its shortage in other parts. It is important that Irrigation Department attends to this responsibility with a view to ensuring economic use of water and availability of water according to requirement of the crop and thereby, leading to increased agriculture productivity.

3) Lack of Seriousness

When I visited the Mohani society on 9th April 1998, the discussion with the office bearers revealed that they or the manager or the members had not developed in all these years proper understanding of their responsibility for management of the irrigation system - technically, organizationally and financially. As a follow up of this visit, I wrote a detailed letter to the President of the society on 16th April 1999 explaining the seriousness of the situation and suggesting what needs to be done. (Annexure A), copy was sent to Irrigation Department officers.. I sent reminder seeking their response. The reply came from the Manager (Annexure-B) informing that the

society considered my views and suggestions but could not agree! There was no communication from the officers of the Irrigation Department, about what they thought of my suggestions. In any case there is no action so far by the society or the Irrigation Department at the time the case study is being prepared in October 1999.

4) Support from Co-operative Department

There is another development agency, namely the Co-operative Department, which could have helped in putting Mohani on a right track through its regular functions of audit, education and training. There may be very large demand of its services and therefore it has to decide priorities depending upon the roster and perhaps on the pressure of those in position of power. It was therefore for the Irrigation Department to approach Cooperative Department to provide instructions and guidance to the irrigation cooperative to improve its performance.

5) Capacity Building of Superintending Engineers

All this means that the Irrigation Department, particularly its senior officers, have to appreciate far greater their responsibility in ensuring sound development and management of irrigation cooperatives, while they are busy promoting new ones and reviving the old. It appears that there is need for strengthening their capacity to fully understand and appreciate what makes a good irrigation cooperative, what are its indicators, how they should monitor the performance of the irrigation cooperatives in their jurisdiction and if some indicators point towards trend of weakness, what measures

they should take to arrest the downside. This calls for much better training of officers in understanding what is involved in promotion and strengthening of village institutions and financial aspects of their management.

Water Resources Development Department, Government of Gujarat, is aware of the problem and therefore has set up a Training Committee, of which I am the Chairman which will give its recommendations in October 1999. However the department will need some time to consider the recommendations of the Committee and issue Government orders.

Meanwhile it would not be correct to allow the situation to remain floating with more societies going the way Mohani is sliding. Unless Superintending Engineers, who are entrusted with the responsibility and powers to promote / revive, support and monitor the irrigation co-operatives, are given immediate and comprehensive instructions what is expected of them, what is happening of Mohani is very likely to happen to more societies. Government cannot provide incentives for second resurrection.

MOHANI WATER CO-OPERATIVE SOCIETY (MWCS)- A CASE STUDY.

1. Introduction

Mohani Water Co-operative Society (MWCS) is located at Chorasi taluka in Surat District, Gujarat state. The society was formed in 1979 , and was one of the first successful irrigation co-operatives promoted by Irrigation Department (ID). Since formation, this society became an instant success, and a demonstration model for other co-operatives. Therefore, Mohani has been much visited and mentioned frequently by various researchers. It was indeed a source of statement for irrigation co-operatives in the Sixth Five Year Plan & Seventh Five Year Plan, and an inspiration for the other irrigation co-operatives. After 10 yr. of successful operation, this society first experienced disruption in 1989. It had repeatedly defaulted in the last few years (1995-97) in its water charge payments to ID. At the time (October' 99) of writing this case study, the society is not in arrears.

To document the developments, two visits were organised to the society and Surat Irrigation Circle (SIC). The methodology for data collection was through -: interviews, group discussion & focus group discussion with the stakeholders of society - the leaders, staff & members of society, ID officials [Superintending Engineer (SE), Executive Engineer (EE) & their others colleagues involved in promotion of PIM programme, specially Mohani]; scrutiny of documents and direct observation in field by the research team.

2. Profile of Mohani Water Co-operative Society (MWCS)

The Kakrapar Irrigation System (KIS) was completed in phases from 1958 to 1977. However, there was considerable lag between the potential created and utilization due to variety of reasons including poor distribution system, lack of field channels and inadequate drainage. Concerned about the poor performance of the system, Area

Development Commissioner (ADC) a high level deptt. official who was supportive of farmer' s organisation conceptualized to form water user' s cooperative. The basis was 1973 Central Government' s Guidelines for Command Area Development (CAD) Programme. Mohani thus, began as a "*Water Distribution Co-operative Society*" that would receive water on a bulk volumetric basis, and be responsible for distributing it to the individual farmers below the measuring point.

Water management was turned over to the society through a formal letter (*which also served as MOU*) by department. Before society took charge of water distribution, department repaired the sub- minors and installed measurement devices at appropriate places for measuring water deliveries to the society. The formal staffing pattern of a manager, a clerk, three field assistants and their salaries were also suggested by the department in this letter. The responsibilities of the department and the society as per the letter were:

Irrigation Department (ID)

- a) Grant managerial subsidy of Rs. 500 per month and reimburse operating losses, if any occurred, for the first three years.
- b) Be responsible for releasing the stipulated quantity of water in the Bhestan minor and its sub-minors and for their construction and maintenance.
- c) Supply water on volumetric basis at a rate of 25 paise per 10,000 litres + local cess at a rate of 20% of 25 paise = 30 paise per 10,000 litres.
- d) Provide technical guidance.
- e) Over all supervision of the system.

Society

- f) Water distribution
- g) Construct field channels and supervise their repair & maintenance by the member farmers.
- h) Collect water charges from members on crop area basis @ flat per ha rates fixed by the deptt. for various crops.

- i) Fix water rates in consultation with the department, recover the water charges from members, and pay dues to government on time.

Mohani was registered under the Gujarat State Co-operatives Society Act of 1961 in Sept. 1978. Initially, 142 members in the command contributed a share capital of Rs. 7,500 to form the society. The General Body (GB) of the society has vested management power in its Management Committee (MC), composed of 10 members including one Pramukh (President). The MC is assisted in the discharge of its responsibility by 5 full-time staff. The profile of society is given below:

Table - 1 , Profile of the Operational area of the Mohani Society, 1998-99.

| | |
|---------------------------------------|--|
| Gross command area (ha.) | 525.02 |
| Culturable command area (ha) | 487.31 |
| No. villages served | 6 (Mohani, Khambhasla, Goja, Kharbasi, Gangva, Delvada) |
| Net area Irrigated in Command (ha.) | 337 |
| Number of sub-minors serving the area | 4 (3L, 4L, 5L and 1 R) |
| Total Length of the sub-minors (km) | 7.31 |
| No. of outlets | 40 |
| Total number of members | 282 |
| Members composition | |
| * Marginal Farmers (less than 1 ha.) | 82 |
| * Small Farmers (1 to 2 ha.) | 114 |
| * Large Farmer (more than 2 ha.) | 84 |

Source: Compiled from 20th Annual Report and Accounts, 1997-98, Mohani society.

The society signed a fresh Memorandum of Understanding (MoU) with ID in 1997. It was in accordance to a new PIM policy for the transfer of canal management to the society.

3. **Findings**

The visit findings are grouped under four main heads: (a) Initial success; (b) Downward slide; (c) Revival ; (d) Future outlook.

3.1. Initial success of society(1979-1989)

3.1.1. Administrative

a) *Incentives to the farmers*

The assured and timely availability of the water was important motivational and influencing factor in the group formation. Before the society was formed, irregular supplies from the canals adversely affected farming, but with the society' s formation reliable and adequate supply was assured. The area irrigated in all the three season had increased by 52%, over the period 1978-79 to 1981-82. The details are provided in table2.

Table 2: Difference and growth in members and irrigated area before and after the society.

| | Year | Total members | Area irrigated in different seasons (in ha.) | | | |
|---------------|---------|---------------|--|---------------|-------------|--------------|
| | | | <i>Hot</i> | <i>Kharif</i> | <i>Rabi</i> | <i>Total</i> |
| <i>Before</i> | 1977-78 | N.A. | 140 | 147 | 154 | 441 |
| | 1978-79 | N.A. | 134 | 163 | 139 | 436 |
| <i>After</i> | 1979-80 | 145 | 225.3 | 272.7 | 211.6 | 710.1 |
| | 1981-82 | 187 | 278.83 | 282.00 | 283.32 | 844.15 |

Source: 20th Annual Report and Accounts of the Mohani Water Cooperative Society. 1997-98.

b) *Leadership*

Effective leadership during the initial years was provided by Shri Bhikhubhai an enlightened, honest, dedicated & benevolent leader. He was then also Sarpanch, Mohani Village Panchayat; Chairman, Khedut Seva Sahakari Mandal (Farmer's Service Co-operative Society) Mohani; Director of the Mohani Village Milk Producer' s Co-operative Society. He held the post of Pramukh for almost 10 years. His good rapport with the ID officials helped a great deal in improving the water supplies in terms of both the quantity and timeliness. His experience in working with the other co-operative institutions of the village, and his leadership qualities translated into a strong Management Committee.

This resulted in a efficient organisational management, conflict resolution, sensitive to the members needs, equity in water distribution and observation of cooperative norms.

c) Cropping pattern

The cropping pattern adopted in Mohani was suggested by Agronomist of Agr. Dept. The pattern planned for the entire Zone II command area of Surat Irrigation Circle was applied to the society. The society was not consulted prior to this decision. Sugarcane was the most important crop grown in the area, both before and after the society came into existence. It accounted for about 32% of Culturable Command Area (CCA) in 1978-79 rabi season (prior to the existence of the society) and about 85% in 1997-98. The details of planned and actual cropping pattern are appended as annexure-1. The planned pattern, suggested 18% CCA for sugarcane cultivation but was not followed as sugarcane was a high value crop and farmers did not want to discourage its cultivation. The planned cropping pattern was suggested to be reviewed after five years , yet the same plan has continued and no one has remembered its existence, or even its reference.

d) Role of Sugar Co-operative

The society had established and maintained a mutually beneficial working relationship with the nearby Chaltan Sugar Cooperative Society. The sugar co-operative provides short term loans to the members of the society for purchase of various farm inputs such as improved seeds, fertilizers, pesticides etc., and recovers on behalf of the society the arrears of water charges from the members for supplying sugarcane. Since most of the society members were also the member of the sugar co-operative, the tie up arrangements had worked well.

e) Serving of Farming Equipments

The society had purchased a tractor and other complementary implements in 1979-80, and used to hire them to its members. The members benefited from concessional rates of tractor and farming equipment' s.

d) Role of the Irrigation Department

As a special government help at the outset, the distribution network of canals were renovated at the Government' s expense, managerial subsidy were offered for the first three years, additional outlets to the minor were added, water courses were lined, and preliminary procedures were set up. This facilitated for smooth interaction between the officials and the society members. The department along with the society organised educational tours for the members to visit Agriculture University-Navsari, Mahi & Panam Irrigation Projects of the state, and other irrigation projects in the states of Rajasthan, Maharastra and Madhya Pradesh.

3.1.2. Financial

b) Water Rates

The amount collected from the society by the department was based on the volumetric water charges @ 30 paise per 1,000 litres. This was less compared to the water charges based on a crop area basis that were recovered by the society from its members. The society was to charge its members in such a way that the crop area rate should not be more than that being charged by the government. (Details at annexure 2). This arrangement enabled generation of surplus. (society gained Rs. 374 / ha. on supplying water for sugarcane crop). Infact, the society made profit only because the major area was designated for sugar cane (more than 80% of CCA). If the major area was under food grains or the cropping pattern was followed, there would have been a loss. Had this planned cropping pattern been followed, the scenario could be as follows:

Table- 3, Comparison of surplus / loss for society for planned and actual cropping pattern

| Sl.no | Items | Planned Cropping Pattern | Actual Cropping Pattern (1983-84) |
|-------|--|--------------------------|-----------------------------------|
| 1. | Difference between the water charge paid to govt. and recovered from members | Rs. 36,500 (approx.) | Rs. 65,000 |
| 2. | Average annual Adm. expenses including rebate etc. | Rs. 50,000 (approx.) | Rs. 50,000 |
| 3. | Net surplus / loss to society | (-) Rs. 13,500 | (+) Rs.15,000 |

Table-3 clearly indicates that the society would be defunct, if the planned pattern was followed and the management subsidy would have stopped. However, the society was never obliged to avail subsidy due to its sound financial position from the outset. This also clarifies, why societies formed by deptt. during that period could function for a few years on the management subsidy and, thereafter, they became defunct. The information collected by Shri Anil Shah in his paper "More or Less" reveals that societies sponsored in 1983-84 by the deptt. were established and managed in rather indifferent manner. Out of 13 societies, he studied only 3 of them managed canals for 3 years as they got subsidy under Government of India scheme, and then stopped working when they became unviable due to department's water pricing policy².

The unique location & history of Mohani and the special efforts by the department made it a classical example, where each measures reduced its replicability. The level of lower water charges, sugarcane cultivation, favorable location: the society's proximity to Chaltan Sugar Mill, the high - level of official concern for success and especially of assured water supply, were not easy to repeat. Infact till 1992, only 8 of 22 societies established by the Irrigation Department in Ukai-Kakrapar Command area functioned successfully.

² Anil Shah, More or Less, January 1999.

3.2. Downward slide of society (1989-1997)

3.2.1. Administrative

a) Leadership

After Bhikhubhai retired, the fortunes of the society took a downward slide. The new president did not exercise control like Bhikhubhai did. There were 5 President' s after BhikhuBhai within a span of 10 yrs. The latter President' s found that the society was facing various crisis - steady degradation of the canal irrigation system, breaking of co-operative rules by members etc. Although current President is young and seems to be enthusiastic and energetic, but due to detoriating infrastructure his position has become weak. The committee members accountable for managing the system do not provide leadership. There is too much dependence on the manager who has been with the society since its inception.

b) Lack of system repair and maintenance

ID was unable to keep the Bhestan minors and sub minors in good working condition for a long time nor complete the rehabilitation works, pending at the time of turnover to the society. This resulted in distortions in water supplies and rise of water bills. On the other hand, members of the society were collectively responsible for a construction, repairs, and maintenance of common fields channels. But none of the works were accomplished.

The research team has observed during its field visits :

- There are at many places big holes. Owing to the deposition of silt, water flow is just half of its designed capacity. Level of the canal is uneven. The deptt. personnel state lack of enough funds for repairs. According to them, the canals are very old and unlined. Secondly, the canal is passing through black cotton soil area and therefore weeds (horse grass) grow very fast inside the canals. Because of crabs, holes have formed in the canals, sub minors and field channels.

The scrutiny of annual reports and conversation with manager brought out the following facts:

- In 1994, the society decided that farmers who did not clean their field channels would not get water. However, the President himself did not clean his field channels and other farmers followed suit.

d) Conflict & resolution

There are many conflicts that are hindering the management of the society that require immediate attention of the Pramukh and committee. They are mainly related for breaking of co-operative norms: head reach farmers take waters twice in rotation, excessive wastage of water, members are not ensuing rotation patterns decided by committee, etc. Few farmers complained of the laxity in society' s administration. The committee makes rule, which are not strictly observed even by the committee members themselves.

An example of this:

- In 1994, the society decided to increase fines from Rs. 50 to Rs. 500 for the members breaking co-operative norms and not following Rotational Water Supply (RWS) pattern. This is not enforced and has created indiscipline among the members.

e) Anomalies in water distribution

Based on the society' s estimated total requirement of water for the season, ID releases the requisite quantity of water. Water is distributed through warabandi schedule, prepared by staff in consultation with the committee. Each member is informed in advance of delivery date and time to enable them to keep their fields ready. The schedule is rarely followed.

- In every rotation now a days, there are quarrels. On each of the sub minor canals, some farmers divert the water to their fields. Another factor that affects the schedule is that field channels are not cleaned, so it takes more time to irrigate the fields. During this period, farmers of middle & tail reaches become restless and break the bund of the head reach farmers. They do not procure water as per rotation. There is lot of wastage of water.
- The society and the ID jointly decided that the society can take water for six days in rotation by heading up (closing CR gates). However, the society does not obey the rules and often uses water for more than six days because farmers irrigate their lands excessively and even twice in rotation.
- In the head reach of the sub minor canal (where a flume is kept for measuring water) and the minor canal, there is a deposition of silt nearly 1/2 foot wide. Because of this deposition, the gauge records show a higher level of water in the canal. As a result, farmers in this area are receiving higher bills than they should be.

f) Loss of farming equipments

During the initial years tractor made substantial profit. Later tractor yielded minimal profits and resulted in losses in two occasions (1989-90 & 1993-94). There were number of factors that contributed to the loss: tractor machinery became old and needed frequent repairs which increased operating costs, lack of attention by the

President & committee members and also a sudden demise of the tractor driver. The society was unable to find any other suitable driver again. Finally, in 1997-98, society sold the tractor.

3.2.2. Financial

a) Recovery of water charges

The society has a system of incentives and disincentives on payments of water charges by the members to encourage cooperative behavior. The water charges can be payable to the society within a year of irrigation. The members who pay their water charges on time get a 20% discount and those who don't pay have to pay a penalty at a rate of 10% per annum. There are number of members who have not paid their dues in time.

- In 1994, the society decided that farmers who have not paid water charges for four seasons shall be charged 1.5 times more and if the practice continues they shall not get water. This rule is not enforced. To circumvent this rule the members whose dues are unpaid and society had decided that they should no longer receive water to them either offer token payment or bribe the patkari's to secure water.
- Some farmers take water for sugar cane but pay according to the rate for paddy. The rates for sugarcane are higher than for paddy. The patkari and manager's along with the MC have the responsibility to cross check the payments with cropping pattern. But, they rarely do this. As a result, the society receives less income although water is used for sugarcane crop.

Table 4 : Details of collection of water charges from members and paid by Society.

| Year | Charges receivable from the irrigators (' 000' Rs.) | Charges recovered from irrigators (' 000 Rs.) | Charges payable to the Department (' 000' Rs.) | Charges paid by the society to Department (' 000' Rs.) | Charges outstanding against the society (' 000' Rs.) |
|----------|---|---|--|--|--|
| 1979- 83 | 797.26 | 797(100%) | 532.58 | 532.58 | - |
| 1983-84 | 242.70 | 242 (99.6%) | 162.28 | 162.28 | - |
| 1984-85 | 254.74 | 253.4(99.5%) | 210.8 | 210.8 | - |
| 1985-86 | 287.03 | 285 (99.3%) | 228.1 | 228.1 | - |
| 1986-87 | 341.92 | 340(99.5%) | 230.5 | 230.5 | - |
| 1987-88 | 304.25 | 303(99.6%) | 210.2 | 210.2 | - |
| 1988-89 | 288.17 | 274(95.2%) | 210.3 | 210.3 | - |
| 1989-90 | 278.62 | 216(77.4%) | 230.55 | 230.55 | - |
| 1990-91 | 162.09 | 161(99.%) | 179.71 | 179.71 | - |
| 1991-92 | 274.78 | 272(99%) | 205.55 | 205.55 | - |
| 1992-93 | 282.68 | 280(99.2%) | 139.87 | 139.87 | - |
| 1993-94 | 294.27 | 286(97.0%) | 189.9 | 189.9 | - |
| 1994-95 | 294.27 | 287.48(98%) | 181.38 | 181.38 | - |
| 1995-96 | 264.60 | 243.33(92%) | 160.71 | 18.44 | 136.27* |
| 1996-97 | 278.20 | 207.83(75%) | 149.97 | | 149.96* |
| 1997-98 | 325.47 | 191.97(59%) | 75.23 | 39.91 | 35.32* |
| 1998-99 | 316.187 | 111.82(35%) | 90.08 | 90.08 | |

Source: 21st Annual Report and Accounts of the Mohani Water Cooperative Society. 1998-99. (Charges were paid during the financial year 1999-2000). Note- The revision in water rates by the Irrigation Department for Irrigation societies in 1997-98 has lowered the water charges.*

Over this period, cost recovery from the members has decreased. Table-4 shows that recovery was never 100%. But for the last three years recovery has slumped. In 96-97 recovery was 74.7 %, 97-98 : 59% and 98-99:35%. The reasons are:

- The committee at times has asked members with dues to pay 50% more, but this is loosely enforced. The lack of interest of members, and staff (manager & patkari) who don' t bother about the situation are also causative factors. The members are able to get water without paying dues. The society did not taken stern steps, including the stoppage of water supply against those members who defaulted on their payment of water charges.
- The sugar co-operative in the last 3 yrs has stopped recovering dues on behalf of society. The reason is a change in leadership. The earlier sugar co-operative leaders had played an important role in the formation, and the working of the society by recovering the water dues of its members. With a change in leader, the situation has reversed. The exemplary co-ordination and complementary roles of two societies is threatened because free riders have lobbied and forced sugar co-operative not to deduct their dues. They argue that with progressively declining productivity of sugar cane, if the dues are deducted, members are left with diminished amounts. The society leaders also did not take any effort in establishing rapport with the new leaders and the good offices of the sugarcane co-operative, and in informing them of the problem.

b) Increase in overhead cost

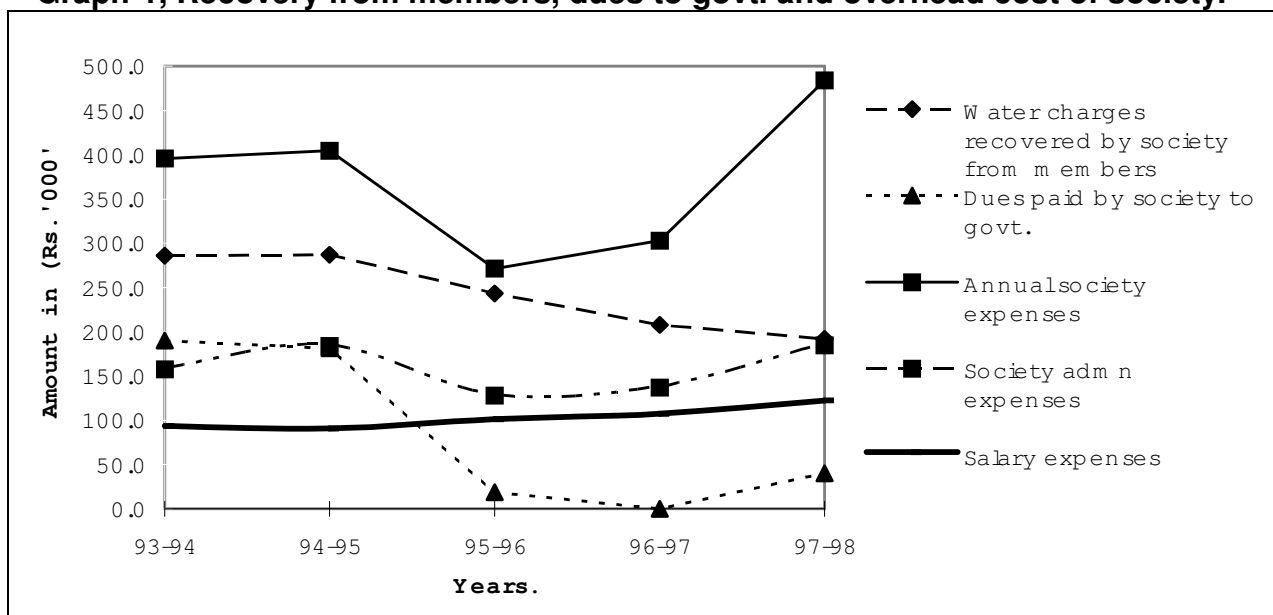
The pattern shows an increase in overhead costs over the years. The lion' s share of the funds goes to staff salary. The executive has increased thier perks, without others (neither dept. nor society members) questioning or reviewing the need or justification for the increased hikes. The staff has the impression that they are also government servants, since their salaries were suggested by ID in a letter, and that they should be paid on par with govt. staff.

Table -5, Details of the Overhead Expenses (in Rs.)

| Years | Total annual expenditure of society | Administrative expenditure | Salary expenditure | Admn.expenditure % of total expenditure | Salary expenditure % of admn. expenditure |
|---------|-------------------------------------|----------------------------|--------------------|---|---|
| 1993-94 | 395,748 | 157,586 | 93,648 | 39.8% | 59.4% |
| 1994-95 | 404,463 | 183,688 | 90,850 | 45.4% | 49.5% |
| 1995-96 | 271,451 | 125,717 | 101,232 | 46.3% | 80.5% |
| 1996-97 | 303,038 | 136,514 | 107,408 | 45.0% | 78.7% |
| 1997-98 | 483,940 | 185,514 | 122,277 | 38.3% | 65.9% |

Source: 16 th,17th, 18th,19th and 20th Annual Report and Accounts of the Mohani Water Cooperative Society 1989-90, 93-94, 94-95, 95-96, 97-98.

Graph-1, Recovery from members, dues to govt. and overhead cost of society.



The society was irregular on payments of dues to govt., and used to pay in successive years. This was because the members paid society charges for the current season, after a long duration. So, difference between the society' s expenses and income increased widely. The status was:

- a) High expenses due to an increase in administrative cost (particularly staff salaries), increase in water bills due to wastage and maintenance of old farming equipment's.
- b) Lower income due to declining recovery from members, loss of farming equipment's.

To keep the society afloat, they needed to meet the annual admn. expenditure. But could n' t do, so they defaulted on water payment to ID for three continuous years.(1995 97). A detailed financial analysis of the year 1997-98 is given below. On this ground, the recovery officer had put the society under liquidation.

Table- 5, Income and Expenditure statement for the year, 1997-98.

| Income | Amount in Rs. | Expenses | Amount in Rs. |
|--|---------------|--|---------------|
| 1. Water charges recovered from irrigators | 207149 | 1. Water charges paid to Government (of earlier years) | 160183 |
| 2. Income from fines on delayed payments etc. | 5341 | 2. Water distribution expenses including rebate to members | 3478 |
| 3. Income from tractor and other farming equipment's | 17943 | 3. Expenses on diesel, driver' s salary. | 17743 |
| 4. Interest on Deposits | 2450 | 4. Society Administration expenses | 136514 |
| 5. Dividend received | 15.00 | | |
| Total income | 232898 | Total Expenses | 317918 |

Profit / loss to society = (-) Rs. 85020. hence the society was not able to pay dues of the current year of Rs. 1,49,000/-. Source: *19th Annual Report and Accounts of the Mohani Water Cooperative Society, 1997-98.*

Productivity consequences: Sugar cane yields has declined considerably due to the tendency of farmer to over irrigate and using mono-cropping rotation (sugar cane permanent). Farmers take so much water (10-12 inches) that their fields turns water logged.

Table-6, Details of water usage per unit of the MWCS (million litres/ha.)

| Seasons | 1996-97 | 1997-98 | 1998-99 |
|---------------|---------|---------|---------|
| <i>Kharif</i> | 3.55 | 5.09 | 3.72 |
| <i>Rabi</i> | 5.37 | 5.45 | 6.58 |
| <i>Hot</i> | 5.91 | 6.62 | 8.88 |
| Average | 4.94 | 5.72 | 6.39 |

4. Revival of Mohani Water Co-operative Society

4.1. Revival of defunct societies

Due to anomalies in the government' s water pricing policy, and the lack of incentive structure, the societies promoted in the early eighties under the joint irrigation management (JIM) programme became defunct within few years. The issue of reviving defunct societies with reference to Mohani, was discussed at PIM Operation Group meeting, 5 July1996.

- Mohani society, since its inception in 1979 till Kharif 1995-96, had paid dept. Rs. 29.55 lacs for water charges. However there was no provision of a 20 % rebate for water charge collections to society applicable for other societies promoted under the new PIM policy. The society is entitled for 20% rebate on water charges. The society also owes more than Rs. 3 lacs to the Dept. and has not been able to pay the necessary water charges due to financial constraints. As the society did not receive financial incentive from the govt., a need emerged for reviving Mohani & other defunct societies and enabled them to receive 20 % rebate. But, during the discussion of Mohani in the PIM Operation Group, it was not known why the society defaulted after a few years. Based on the known facts about Mohani and others, the Operation Group decided that the Superintending engineer (SE) concerned should be authorized to examine the possibility of reviving defunct societies. According to the Govt. order dated: 15-12-97:-

- a) SE' s should collect all the information about the defunct coöperative societies, thier history, and functioning, financial obligations in terms of water rate collection and payment to the govt.
- b) An assessment should also be conducted of financial viability and managerial competency of societies.
- c) Benefit should be extended only to those societies that shall come forward to take the responsibility of PIM as the articulated in present PIM policies.
- d) Societies shall also receive a 20 % rebate for the paid irrigation water charges.

4.2. Mohani's Revival

The Mohani society was revived in April' 1997. Although, the government resolution laid clear criteria for revival of defunct societies, research team is not clear and certain of criteria that SE - Surat took for consideration. Superintending Engineer while reviving society may have thought more about dept. recovering water dues of Rs. 3.71 lacs from society. The details of calculation are given below:

Table -7, Details for calculation of amount for rebate for Mohani.

| Sl.no | Items | Amount in Rs. |
|-------|---|----------------|
| 1. | Total amount paid by the society as water charge from 1980 to 1997 | Rs. 32.1 lacs. |
| 2. | Rebate calculated @ of 20% on the above amounts. | Rs. 6.42 lacs |
| 3. | Amount due from the society to Irrigation Department at end of March 97 | Rs. 3.71 lacs |
| 4. | Amount deducted for managerial subsidy* | Rs. 16,895/- |
| 5. | Total amount paid to the society [2-(3+4)] | Rs. 2.54 lacs |

* Note : Although society did not utilise the managerial subsidy from the government, ID at the time of calculation of rebate deducted subsidy for two yrs.

5. Future Outlook

5.1. New emerging context of PIM programme

The Gujarat Government' s new PIM policy resolutions welcomes the participation of farmers organisation in the planning, design, execution of minor irrigation projects and

canal systems. The farmers organisations should be willing to contribute 10% towards the capital expenditure for rehabilitation and modernization of irrigation works / canal systems. The resolution provides freedom to organisations to decide their own water rates as long as they are less than the govt. rates. They shall receive a 20% rebate of the water charges if 100% of the water charge is collected and paid to government on due time, and a 30% is allocated for normal maintenance of canals and of the sub minors.

5.2. Administrative

a) Rehabilitation and farmers contribution

The minors and sub minors under the command area of Mohani were not completely repaired & rehabilitated prior to signing the MOU. The total cost for repairs & rehabilitation in accordance with joint survey was Rs. 28 lacs and of which Rs.11 lacs works was done by the dept. The work of Rs. 17 lacs are pending, and society' s contribution is Rs. 1.7 lacs. The society did not contribute in earlier rehabilitation' s, and presently is also resisting contribution. The society is not satisfied with ID' s work nor are they willing to repair canals. The issue was discussed during Shri Anil. Shah' s visit to the society in April ' 98, and at the Circle Level Cœrdination meeting of PIM. The society still insists that ID should either do the unfinished work free of cost as promised at the time of society' s inception, and the department has done for other areas of Ukai Kakrapur command. The approx. contribution shall be Rs. 350/ha. and can be easily collected from society members. Improvements in the canals system, regular canal maintenance and suitable crop rotation would increase the production of the command area considerably.

b) Role of Irrigation Department

The role of the catalytic agency i.e. Irrigation Department is very important in rectifying institutional gaps in operating systems of Mohani for it to regain its esteemed position. The society will require ongoing assistance, in terms of organisational strengthening

and management, as well as in technical areas. The department who had helped in establishing and functioning of the society can provide a service role to:

- Provide expertise in form of concepts and ideas to society such as :-
 - * making members perceive benefits of contribution to develop sense of "ownership" i.e. a personal stake in programme for long term enduring sustainability.
 - * maintenance of canal systems, increase in water charges for members and economic use of water.

- Rules Enforcement : Contribute to the smooth functioning and reliable financial & institutional performance of society by establishing the legitimacy of water distribution norms, conflict & resolution and charge recovery from its members. Infact, enforcement of punishment is critical to the sustainability of cooperative mechanism. The threat of punishment to be credible, deviations must be detected immediately and punishment (economic & social) imposed. For example, cutting off supplies to members those who don' t pay water charges at time can be a effective mechanism.

- Operating System : The right operating system can generate high rewards for collective co-operative action and regain the faith and allegiance of members.

- Financial Sustainability: The financial viability of the society is critical to the sustainability of the co-operative organisations..The department can help committee in planning thier annual budgets - income & expenditure flows, and lower their administrative costs. The study indicates that the any co-operative societies cannot operate at a deficit or minimal profits. Even an annual shortfall of funds can run the organisation in loss.

- Leadership: Help to bring the members together, and groom new leaders for future. Charismatic leaders / individuals cannot remain always ; new leaders are required to guide, keep the wheels moving, provide vision and values to co-operative institutions.
- Capacity Building: Study is also emphasize a need to strengthened the capacities of the members so that thier capabilities are developed for performance of technical, financial, managerial and administrative roles. The improved capacities of the members will help the society to function as an "effective farmers organisation" that can take up the responsibility for management of the canals. Training programmes & exposure visits of members can be organised to other areas where farmers can see the demonstration of the positive impact of PIM programmes. Exposure visit to irrigation societies promoted by AKRSP(I) in Bharuch distt. and DSC in North Gujarat are possibilities suggested by Shri Anil Shah in his letter dated 16-4-99 to President, Mohani during his visit and discussion with society members. Our dialogue with officials for the same indicated lack of budgets for exposure visit & information sharing.

The department can suggest the items to society, and review them in the Circle & Project Level Co-ordination meetings.

5.3. Financial

a) Increase in water rates

The society levies members as per the govt. rate and efforts to raise the water charges are faced with stiff resistance from farmers who see that neighboring areas continue to pay minimal fees. The society needs to learn from societies in other parts of state that charge 2 to 3 times of govt. rate which enables their society to provide assured and quality services.

c) Recovery of water charges

The lower rates with low recoveries are dragging society at few times to losses. Due to the low recovery of water charges from its members, rising over head cost, higher water bills and flaws in the recovery system (a year is granted), sometimes the society is not able to pay to ID. They don' t avail 50% rebate on water charges provided by the government to societies for timely recovery and for maintenance of sub minors, minors and field channels. The society pays to the government annually 1.0 lacs (average) and hence, can be entitled for rebate Rs. 50,000 p.a. which will be a major boom for financial sustainability of the society.

ANNEXURE 1

Comparison of the present cropping pattern with planned cropping pattern.

| Sl. no | Crops | Planned Cropping Pattern | | Actual Cropping Pattern (97-98) | |
|---------------|------------------|---------------------------------|------------------------|--|------------------------|
| | | Area (in ha.) | % of total area | Area (in ha.) | % of total area |
| 1 | Kharif Paddy | 73.1 | 15 | 54 | 5.1 |
| 2 | Kharif Vegetable | 58.4 | 12 | | |
| 3 | Rabi Juwar | 63.35 | 13 | | |
| 4 | Wheat | 48.73 | 10 | 1 | 0.1 |
| 5 | Vegetable | 73.1 | 15 | 12 | 1.1 |
| 6 | Sugarcane | 87.72 | 18 | 912 | 85.3 |
| 7 | Other Perennials | 38.98 | 8 | 39 | 3.6 |
| 8 | Cotton | 9.75 | 2 | | 0.0 |
| 9 | H.W. Vegetables | 34.11 | 7 | 25 | 2.3 |
| 10 | Other Crops | 0 | 0 | 26 | 2.4 |
| | Total | 487.24 | 100 | 1069 | 100.0 |

ANNEXURE 2

Difference between the govt. rates at which water is purchased at volumetric basis by society and supplied at crop area basis to members.

| Sl no | Crops (1) | Cost of estimated water required per crop purchased at volumetric basis from ID for society (Rs /ha) (2) | Cost of Water Charges levied by the society to members in crop area basis.(Rs/ha) (3) | Surplus or deficit (loss) to society (3-2) (4) |
|-------|------------------|--|--|--|
| 1 | Kharif Sugarcane | 63.12 | 170 | (+) 106.88 |
| 2 | Rabi Sugarcane | 122.15 | 290 | (+) 167.85 |
| 3 | Summer Sugarcane | 271.25 | 370 | (+) 98.75 |
| | Sugarcane | 456.52 | 830 | (+) 373.48 |
| 4 | Kharif Paddy | 216.45 | 110 | (-) 106.45 |
| 5 | Rabi Vegetable | 80.12 | 100 | (+) 19.58 |
| 6 | Summer Vegetable | 175.50 | 140 | (-) 35.50 |
| 7 | Rabi Other | 81.87 | 100 | (+) 18.93 |
| 8 | Summer Other | 175.85 | 141.00 | (-) 35.05 |
| 9 | Rabi Juwar | 92.12 | 100 | (+) 7.86 |
| 10 | Rabi Wheat | 131.62 | 110 | (-) 21.62 |
| 11 | Kharif Cotton | 97.40 | 75 | (-) 22.48 |
| 12 | Summer Orchard | 225.22 | 570 | (+) 344.78 |

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