

# NGOs AND INSTITUTIONAL REFORMS: A CASE STUDY OF IRRIGATION SECTOR REFORMS IN GUJARAT, INDIA

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## BACKGROUND

Being dependent for a long time on the vagaries of monsoon, India has placed a very great emphasis on development of the irrigation sector right from independence. However the problems of under-utilisation, lack of access by tail-end farmers, poor maintenance and non-viability of the irrigation systems persist in the government owned surface irrigation schemes. On the other hand, small, privately owned irrigation systems (dugwells, tubewells, etc.) are found to be more efficient and provide more than 50 percent of irrigation in India. Water rates have not been increased because of political populism. In fact, the average water rate is only 3 percent of the estimated net benefit from irrigation. Because of the low water rates and poor recovery rates, revenue from the irrigation sector covers only 20 percent of the cost of operation and maintenance, making the sector highly subsidised and non-viable. These problems in the irrigation sector are more or less found in all states of India.

Gujarat is an industrially prosperous state of western India. However, it lags behind the rest of the country in the agriculture sector primarily because of the comparatively smaller area under irrigation (only 27 percent of the cultivated area is under irrigation compared to the national average of 33 percent). In Gujarat the utilisation of irrigation schemes, maintenance and water rate recovery also continue to be very poor. Of the estimated operational and maintenance (O and M) costs of Rs. 400 million/year (US \$ 10 million), the low water rates can cover only Rs. 180 million (US 4.5 million) and since only Rs. 100-120 million (US \$ 2.5-3 million) per year are recovered, the effective subsidy is 70 percent of the O and M costs. Water rates have not increased since the 1960s because of political pressure. The relationship between the farmers and the irrigation department is not very cordial because the farmers perceive that the systems are not working well, and therefore not worth paying any more for, while the department expresses inability to maintain systems.

Since water is a major priority, farmers were constantly looking for alternatives. In this scenario, a few NGOs took up water related activities in the late 1970s and 1980s (Lift Irrigation Schemes, Checkdams, Recharge Structures, etc.) which were very popular. Because of the Gandhian Movement, the credibility of the Non-Government Organisations (NGOs) in this state is high. There are many examples of NGO-GO collaboration in the areas of education, relief work, etc.

The author is working in one of the NGOs, the Aga Khan Rural Support Programme (India) [AKRSP(I)], which is working in 3 distinct districts of Gujarat State on community management of natural resources. AKRSP(I) was established in 1984 and believes that the village community can be empowered to manage their own natural resources in a sustainable manner to improve the quality of their lives. Hence, in the last 14 years, AKRSP(I) has promoted more than 450 Village Institutions to manage their natural resources. The initial leadership was provided by Mr. Anil Shah, who previously was a senior officer in the Gujarat Government. Because of his background AKRSP(I), in addition to implementing programmes at the grassroots level, also focused on making government policies and procedures people-centered.

## **THE INITIAL SITUATION**

During 1985-1987, Gujarat faced one of the worst droughts of the century. This drought left an indelible impression in the minds of the farmers regarding the importance of irrigation and the need for new irrigation schemes throughout the state. However the status of the irrigation sector was highly unsatisfactory. Most of the minor irrigation schemes with a command area of less than 1,000 ha were not functional. At most places, the tail-enders did not get access to the irrigation water. Many senior officers of the irrigation department were not satisfied with the state of affairs, and several attempts had been made to change the scenario. The externally aided projects had tried to push through farmers' participation through the formation of water users associations, etc., but since these were formed merely to satisfy the conditionalities of the external agency and without any internal conviction, there was little real participation of farmers. Farmers who were in the command area of irrigation schemes found their complaints unheeded. The problem was increasing year by year because there were insufficient funds for O and M.

## **THE REFORM PROCESS**

The AKRSP(I) had helped, in 1987, to establish Lift Irrigation Co-operative Societies in a tribal district of Bharuch which had only 6 percent of its cultivated area under irrigation despite having an average rainfall of 1100 mm. These co-operative Societies were functioning well, setting their own water rates (3 to 4 times the Government rates) with high recovery. During a discussion on the relative success of such schemes vis-à-vis the government schemes, the Secretary (irrigation) [the highest ranking government official in the Irrigation Department] pointed out that while these small schemes of 50-100 ha were noteworthy, a large number of canal irrigation projects of the Government were under-utilised. In fact, there was one very near AKRSP(I)'s area of operation. By revitalising such a project, more than 500 ha could be irrigated and 500 tribal farmers could have access to irrigation facilities. Nervous about taking on such a large project, AKRSP(I) had a series of meetings with the farmers of the Pingot Irrigation System which, on the right bank of Mich, was irrigating 10 ha against the planned 500 ha. The tribal farmers in the command area were cynical and indifferent, because they had been complaining since 1982 when the dam was established, and had gotten nowhere. To focus on this, AKRSP(I) appointed a community organiser in 1989 specifically to motivate and organise these farmers, and this process took 3 years (the society was registered in 1991). Senior officers looking after the project were being persuaded to test the canal, identify the lacunae and rehabilitate the system along with the farmers.

Meanwhile, Mr. Anil Shah had read 'Transforming a Bureaucracy' a book narrating how the irrigation sector in Philippines had become farmer-centered. Realising that in canal irrigation the government would always be a major actor, and unless its attitude was changed there was no hope. He persuaded the Ford Foundation to sponsor an exposure visit to the Philippines with staff from the Government Irrigation Department and his own NGO. The Government Engineer was Mr. G. D. Patel, a very down-to-earth dynamic Chief Engineer who was in charge of Bharuch District which covered the work at Pingot. The trip was a great success and Mr. G. D. Patel came back transformed into a man with a mission, namely to ensure that irrigation systems were managed by farmers. With his zeal, rapid progress took place. The government sponsored the visit of the founding father of Participatory Irrigation Management (PIM) in Philippines, Benjamin Bagadion, who went around Gujarat and addressed the Irrigation Department Staff from the State in a major workshop. While, on the one hand, AKRSP(I) was asked to take up more pilot projects in Bharuch, on the other hand, work on changing procedures to make farmers' participation feasible was taken up by Mr. Anil Shah and Mr. G. D. Patel. Mr. G. D. Patel used to hold very frequent meetings with the villagers and review the progress of the system rehabilitation. Because of these outdoor meetings (usually held in farmers' fields), the villagers and the NGO field staff acquired confidence in dealing with the government engineers.

Working groups involving the Secretary, and even the Chief Secretary (the highest ranking bureaucrat in the State), were established and all these fora had farmer leaders from the initial pilot projects of Pingot and Baladeva.

A second exposure visit to Philippines in 1993 led by the Secretary (Irrigation) had ended with a workshop in which PIM had been explained to over 100 senior staff from the state. Because of this, there was awareness in the entire state about what was happening in Bharuch District and the need for change in approach by the Irrigation Department. AKRSP(I) found that though irrigation staff at the highest level were very clear, at the operational level, the involvement of farmers was resented. Field staff did not understand and approve of the new role vis-à-vis farmers and there was resentment towards NGOs for introducing these changes. Hence, AKRSP(I) staff, along with some interested staff from WALMI, undertook a large amount of training to change the attitude and behaviour of the staff as well as clarify why PIM was being introduced (see Annex 2). Over time, many staff from the irrigation department have emerged as trainers, and it has become easier to convince newer staff.

In 1994 the Secretary (Irrigation) changed, and there was concern about the new Secretary's stand on PIM, since he had not been exposed to the Philippines. Fortunately the new Secretary, Mr. B. J. Parmar, had been exposed to PIM in other countries, and also to the Pilot Projects already functioning well in Bharuch District. This ensured his commitment to the reform process. In 1995, these efforts resulted in the Government Resolution of 1 June 1995, clearly establishing PIM as a policy of the State Government. Meanwhile, Anil Shah had left AKRSP(I) and started the Development Support Centre, a support NGO focusing on water issues in Western Gujarat. Collaboration with AKRSP(I) continued, both in terms of exposing procedural bottlenecks and training of irrigation staff through field exposure visits and workshops.

Over the last two years, targets are being set for irrigation department staff to involve farmers. There is continuous emphasis by the NGOs that farmers' society cannot be measured only by targets, but by farmers taking up more responsibilities. The condition of getting farmers' contribution (5 percent for new projects and 10 percent for old projects) for rehabilitation, which is a part of the PIM resolution, ensures that farmers are involved intensively before rehabilitation (it takes a lot of dialogue and interaction to get farmers to contribute!). Though the government still depends on NGOs for community organising, a recent trial of NGOs training Community Organisers (COs) and giving them to the irrigation department may help in scaling up.

Mr. Anil Shah remains a principal actor in this change process, but increasingly, at the project level, co-ordination between the farmers and irrigation staff does not require NGO involvement.

## **THE OUTCOME**

Let's look at what has been achieved so far:

- There is a Gujarat Government resolution which actively invites farmers to participate in the management of irrigation systems. To prevent this resolution from being mere rhetoric, a Memorandum of Understanding, through which the farmers take over the irrigation systems, has also been established;
- A large number of procedures have been created and changed to ensure that farmers can effectively participate in the management of their own irrigation systems (see Annex 1);
- Within the irrigation department staff, there is an acceptance that the way ahead is through involving the farmers;

- There is also an acceptance that NGOs are equal partners in the reform process and the community organisation is an essential component for any XXX government subsidises the cost of community organising process by NGOs;
- This reform process has survived 3 governments (i.e. 3 different political parties), and political leaders of all these parties have agreed that farmers' participation and handing over responsibility by the government is the way ahead;
- It has also survived changes in key personnel over time, i.e., the Secretary of Irrigation has changed and so have most of the Chief Engineers. This has affected the pace of the reforms in some places, but has not led to any reversal of policy;
- In terms of impact, 25,000 ha are being handed over to farmers. Now the government has started taking up PIM on its own, where NGOs are not present. The major impact is in the mindset of the departmental staff';
- At almost all levels it is accepted that there is a need to change. PIM is now a part of the criteria on which irrigation staff are assessed, which ensures that the reward system within the department also recognises PIM; and,
- Increasingly in training programmes, the irrigation staff is asking for inputs on how to do PIM. The stage of convincing them as to why PIM is needed is over.

## **THE LESSONS LEARNED**

- Within every bureaucracy there are key individuals who can become change agents if they are motivated and transformed. Exposure visits to successful areas, and preferable areas where similar type of individuals have transformed themselves, can be invaluable for this transformation. I believe that the irrigation staff of Gujarat, i.e. Chief Engineers like Mr. G. D. Patel and Mr. J. B. Patel and the Secretary (Irrigation), changed their attitude because they interacted with Engineers of the Irrigation Department of the Philippines, who had implemented PIM. If they had not met these engineers, but merely have been transformed. Hence, exposure visits to successful projects is of key importance;
- If one desires to reform the existing public system, it is essential to demonstrate that this can be done. Because AKRSP could demonstrate successful PIM projects in a backward tribal area, the irrigation department had to acknowledge that farmers could manage their own irrigation projects and farmers participation was not merely rhetoric but reality;
- The SLWG were official bodies, and therefore survived the changes. Government staff are subject to transfer all the time, and political systems often change in a country like India. Hence, it is essential to create systems and procedures which survive these changes. The working groups which were formed at the district and state level wherein the highest officers could interact directly with farmers, ensured that this forum was available to farmers and NGOs to interact regularly with the government staff, regardless of which government was in power;
- Most farmers, if organised and committed, can manage their own irrigation systems. Groups of farmers agree to pay water rates higher than the government rates if they find this necessary for the viability of their society;
- NGOs, if they focus on macro-policy changes, can do so successfully provided there is a positive political acceptance of the role of NGOs in civil society;
- Reforms which have been started from within (Gujarat State in this case) are more likely to be sustainable than those imposed by external agencies as conditionalities. However, it is essential that the regional bureaucracy receives support at the national level. In this case there has been a conducive environment supporting PIM at the national level, with two national PIM workshops being held recently;

- Since a large number of decisions on procedures and policies were discussed at the grassroots level meetings with farmers, NGO staff and government field staff, the policy and procedural changes are realistic and address the need of all three parties involved in the reform process;
- A large number of exposure visits, training sessions and workshops involving farmers and irrigation department staff, with NGOs playing a facilitating role, are required in the initial phase to internalise changes within a bureaucracy; and,
- The reform process in the government sector, because of its strong rigid hierarchical structure is top-down. Hence, the key change agents have to be officials with powers to change the existing way of working. To facilitate quantum of approaches in the government, the reform process may need to be top-down.

## **REPLICABILITY**

The high credibility of the NGO sector in Gujarat, and the presence of a senior Ex-Government Officer like Anil Shah heading an NGO, are unique aspects which may not be replicable. It may not be as easy for other NGO leaders to enjoy access to government staff at the highest level. However, the author believes that this non-replicable factor can be compensated by other mechanisms. The author has participated in similar reforms in the drinking water sector after Mr. Anil Shah had left AKRSP(I). His absence has been compensated by the creation of a network of NGOs that actively pursue policy changes in the XXX training sector.

### Annex 1. Key Government Resolutions

No.	Date	Subject
1	19.6.1990	Entrusting to AKRSP responsibility for Water distribution Irrigation Society
2	24.3.1994	Simplification of procedure for entrusting rural development programmes to voluntary organisations service of Community Organiser for Participatory Irrigation Management (PIM)
4	23.3.1995	Format for agreement between NGOs and Government Organisations when development works are entrusted to them
5	3.5.1995	Panel of experts for approving plans and systems prepared by voluntary organisations to obviate need for technical scrutiny and sanction by department officers
6	1.6.1995	Policy resolutions for implementing PIM in Gujarat
7	21.7.1995	Approving bye-laws for irrigation co-operative societies
8	22.11.1995	Memorandum of Understanding between Government Administration and Water Users Association when Government Irrigation project is transferred for management
9	22.11.1995	Action Plan for implementing Government policy resolution on PIM
10	30.1.1996	Formation of State level working Group for Participatory Management
11	23.2.1996	Entrusting responsibility for 13 pilot projects to Chief Engineer, PIM

### Annex 2A. Exposure Visit

Time	Place	Participants	Duration	Outcome
End 1991	Philippines and Indonesia	NGO-GO Team consisting of 6 members – CE, Shri	15 days	<ul style="list-style-type: none"> <li>• Motivating CE for PIM projects</li> <li>• Increase frequent field visits</li> <li>• Gujarat and ?? to</li> </ul>
Mid 1993	Philippines	NGO-GO Team consisting of 6 members headed by Secretary (Irrigation)	10 days	<ul style="list-style-type: none"> <li>• Workshop for all CEs/SEs of State on PIM</li> <li>• Initiatives toward GOG policy change</li> </ul>
Mid 1994	Philippines	NGO-GO Team consisting of 6 members: Academicians, 1 CE and 1 Secretary (Fin) from Gov't	10 days	<ul style="list-style-type: none"> <li>• Continued support for PIM</li> <li>• Improved understanding of PDR</li> </ul>

### Annex 2B. Workshops

In 1995 and 1996, 11 workshops were organised at WALMI on PIM, lasting 1-2 days and with 30-50 trainees, out of which 3 workshops have been high-level with participation by Secretary (Irrigation), Minister (Irrigation), Chief Engineers and NGOs were actually involved in all workshops and farmer representatives also called to participate in 10-13 workshops.

### Annex 2C. Training for Irrigation Staff on PIM by AKRSP(I)/WALMI

Date / Duration of Training	Training Objectives	No. of Trainees	Location	Outcome
October 1993 2 days	<ul style="list-style-type: none"> <li>• Awareness of PIM</li> <li>• Role of NGO &amp; GO in PIM</li> <li>• What Community Organising involves</li> </ul>	GO: 11 NGO: 10	WALMI Anand	<ul style="list-style-type: none"> <li>• Flow Chart on PIM process</li> <li>• Clarity on NGO role</li> <li>• Clarity on 'why' of PIM</li> </ul>
March 1994 2 days	<ul style="list-style-type: none"> <li>• Identify individual values and change in values for PIM</li> <li>• Clarify problems in NGO-GO relationships</li> </ul>	GO: 14 NGO: 5 WALMI: 2	WALMI Anand	<ul style="list-style-type: none"> <li>• Clarity on strengths and weaknesses of NGO-GO in PIM</li> <li>• Expectations of GO from NGO/village group</li> </ul>
2 days	<ul style="list-style-type: none"> <li>• Laknigam project field staff to farmers' perspective on project problems</li> <li>• Expose staff to Participatory Rural Appraisal (PRA) methods</li> </ul>	GO: NGO: 5 Farmers: 12	Site village	<ul style="list-style-type: none"> <li>• Faced by farmers</li> <li>• Need for group formation for equitable distribution of water</li> <li>• Sensitisation to living conditions of tribal farmers</li> </ul>
August 1995 2 days	<ul style="list-style-type: none"> <li>• Create awareness on PIM in lower level staff</li> <li>• Understand problems of field staff vis-à-vis PIM</li> </ul>	GO: 32 NGO: 3	WALMI	<ul style="list-style-type: none"> <li>• Increase in self esteem of Irrigation Staff</li> <li>• Understanding of PIM</li> <li>• Better co-operation at field level</li> </ul>
August 1996 1 day	<ul style="list-style-type: none"> <li>• Awareness on PIM &amp; NGO's role for new project staff</li> </ul>	GO: 14	AKRSP(I) Campus, Gadu	<ul style="list-style-type: none"> <li>• Awareness on PIM</li> <li>• Action Plan for future interaction</li> </ul>