

Civic Monitoring of Narmada Based Drinking Water Pipeline Project Processes Followed and Lessons Learnt¹

Pravah² and CFDA³

Introduction

The Narmada Canal Based Drinking Water Pipeline Project is one of the biggest drinking water projects in the world. This project is expected to cover more than 9500 villages (out of the total of 18114 villages in the state) and 139 towns and cities of Gujarat State through 2700 km long pipelines. The project will cover entire Saurashtra and Kachchh as well as parts of North Gujarat (parts of Ahmedabad, Mehsana, Banaskantha, and Sabarkantha) and Panchmahals.

The capital cost of the project has been estimated to be Rs. 7470 crores (at 2001 prices) and the operation and maintenance cost of Rs. 511.86 crores (at 2001 prices) per year. The project is important for Gujarat, as it will cover a little less than half of the total villages and more than 55 percent of urban centers of the state. So far the project has covered 1274 (about 1300) villages and 32 towns.

It is important to monitor such a project concurrently, as it will help in improving the performance of the project while under implementation. It has been decided therefore by PRAVAH and ITP⁴ to initiate citizens' monitoring system to monitor the implementation of the Narmada Pipeline Project (NPP) concurrently for the year May 2004 – April 2005 in collaboration with Centre For Development Alternatives (CFDA).

This monitoring system is participatory in nature in the sense that it will involve a large number of NGOs, CBOs, people's organizations and citizens in the process of monitoring. It will thus be an exercise of capacity building and empowerment of people - which is one of the major objectives of PRAVAH, which is a network of voluntary organizations and individuals spread over the entire state and working in the area of drinking water. The findings of this citizens' monitoring will be used for policy advocacy at the community level, at the village level as well as at the state level. The ultimate objective of this monitoring is to move towards the goal of ensuring safe, adequate and sustainable water supply to all in the state.

Origin of the Project

Gujarat government decided to use Narmada waters for providing drinking and domestic water to people in Saurashtra, Kachchh and North Gujarat when it was realized that local water as well

¹ Paper prepared for the national workshop on "Lessons from Different Approaches of Monitoring of Large Scale Development Initiatives" organized by WASAN at Hyderabad on 7-8 February, 2006.

² PRAVAH is a network of NGOs, Academicians, Researchers and Individuals working on Drinking water and Sanitation related Issues in Gujarat

³ Centre for Development Alternatives, Ahmedabad provided academic inputs to the project. Prof Indira Hirway and Mr. Subhrangsu Goswami from CFDA are also the authors of the report of the project.

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as water supply in the regional pipeline schemes were not adequate to meet the demand for water in these regions. The number of villages to be covered under the project has increased continuously, from 4000 in the early nineties to 8500 in the mid nineties to 9500 in the early years of the new century. Narmada water is seen as some kind of panacea for the water problem in Gujarat.

Huge investments have gone into the project so far and it becomes important to ensure that the benefits of the programme is maximized by setting up a information system in which the ground realities reach the policy makers at the State/ National level.

PRAVAH as a network of NGOs working on Drinking water was concerned about the outcomes of the project. A one day consultation was therefore organized with Pravah members to know their opinion about organizing a Citizen's Monitoring System and how to organize it if it was agreed to organize it. At the end of the meeting the members agreed to conduct a periodic survey to know the status of Narmada water being supplied to the villages in their areas.

Following this CFDA, which is a founder member of PRAVAH, took the responsibility of getting the list of villages that were claimed to be covered by the Narmada based drinking water pipeline project. This in itself was a Herculean task as the list of villages got from the State level and the District level had great variations in the number of villages covered. However since the district level information is usually more accurate, it was decided to have the district level list of villages in this CMS. ITP, Anand became a partner in this process by agreeing to support such a monitoring system.

Following the commitment from ITP Anand, a one day workshop was organized to discuss the Schedules for the study and the other components like finance, time period etc.

Partners in this project

The Partners to this project were over 44 organizations who are members/ partners of PRAVAH. CFDA, ITP and PRAVAH agreed upon their respective roles as follows:

PRAVAH – Ahmedabad Office

- Organize the field surveys through its member/ partner organization
- Disseminate the findings to all the stakeholders
- Dialogue with concerned networks/ organizations at the State, National and International levels.
- Organize discussions on the final report and develop policy advocacy strategies
- Use website for dissemination of quarterly reports.

PRAVAH – Regional Centers

- Organize Training workshops in collaboration with CFDA and ITP at the regional levels to train field level investigators
- Monitor the survey using the Schedules – 1 & 2, with the support from CFDA and ITP.
- Conduct district level and regional meetings to discuss the major findings and to monitor the study.

- Coordinate the collection of the schedules and submit them to CFDA for data entry/ analysis
- Organize discussions on the quarterly reports and discuss advocacy strategies for PRAVAH

ITP – Anand

- Sponsor the project by providing the funds and become an overall partner of the project
- Further data analysis and other data support
- Hosting the findings on their website

CFDA – Ahmedabad

- Prepare the schedules
- Support in the training workshop for field investigators from various organizations
- Monitor the field surveys
- Organize data entry and analysis
- Prepare quarterly reports and the final report
- Conduct selected case studies during the project period
- Disseminate findings of the study to Members / Partner organization as well as in academic journals and organize its publication
- Participate in the survey
- Promote advocacy efforts in relevant places

Approach

Following the identification of the roles and responsibilities mentioned above, the schedules were prepared by CFDA. A workshop was organized in which all the members who were going to participate in this study were invited.

This workshop was facilitated by Dr. Indira Hirway, Ms. Nafisa Barot and Mr. Jayesh Talati along with other members of PRAVAH. The outcome of this meeting was:

- The Schedules were discussed with the participating organizations
- The list of villages was discussed with the organizations and a consent letter from them was obtained.
- The time period for the study and the periodicity of the study was discussed
- The financial systems and reporting mechanisms were clarified.

Training of NGOs for Conducting Survey

One day training for the field workers of various organizations participating in this study was done to orient them with the filling of the schedules. Many of the participants had doubts about filling the information sought. This workshop was facilitated by Dr. Indira Hirway, Ms. Nafisa Barot and PRAVAH members. At the end of the workshop a time period was decided for the submission of the schedules along with the financial resources available for this study.

The following are the details of the various workshops held at various levels to discuss the Schedule and operationalize the CMS.

Nature of Training Workshop	Numbers	No. of Participants	No. of Organizations
State Level Workshop	1	45	44
Regional Level Workshop	4	80	34
District Level Workshop	4	40	23

Conducting Surveys

Two schedules were prepared for conducting the survey (attached herewith as Annexure)

	Frequency	Details
Schedule-1	Once during the year (post monsoon)	Comprehensive demographic profile of the village
Schedule-2	Four times during the year (every three months)	Details about the sources of drinking water especially regarding Narmada waters

The time period for this study was May 2004- June 2005 during which four rounds of the survey were conducted to capture the seasonal variations in the status of drinking water across the four seasons. The time period identified were

	Schedule	Time period
First round	2	May- Aug
Second round	1 & 2	Sep- Nov
Third round	2	Dec- Mar
Fourth round	2	Apr- Jun

Major Findings

- **No. of villages covered under the project**
- **Actual Reach of Narmada Water**
- **Sources of Water Supply in Villages**
- **Household Accessibility of Narmada Water**
- **Regularity of Water Supply**
- **Adequacy of Water Supply**
- **Distribution of the Narmada water in the villages**
- **Local Management of the drinking water**
- **Testing of Water Quality**

Comments by Investigators

- Narmada Water has reached a large number of villages in the state,
- One major complaint about the NPP is that the water supply is irregular and not dependable in terms of
 - Frequency/periodicity of supply
 - Timings of supply and
 - Adequacy of water supply
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- Some common problems that people face are
 - Lack of proper drainage/ disposal of used water at the sump / stand posts
 - Lack of sanitation facilities at the village level
 - Lack of storage facility with people especially the poor
- Local sources of drinking water were also used simultaneously by people. It was felt by some people that local sources also should be developed.
- There is a good scope for improvement in the way water is provided under the NPP. (20% villages) in terms of improving quality, regularity, dependability etc.

Observations

The four rounds of the citizens monitoring have thrown very useful light on the designing and working of the NPP project.

The major issues emerging from the study can be divided in to three categories:

1. The rules / guidelines formed for the distribution of water under the NPP are not implemented well
2. There are several limitations of the guidelines
3. There are some problems, which stem from the limitations of long distance pipeline schemes.

The rules or the guidelines of distribution of water supply under the project are not followed well in practice. There are several gaps between the guidelines and the reality –

- Narmada Pipeline Project is progressing in the state but in a slow manner. So far the project has covered about 1224 villages (till April 2004) as against the target of 8215 villages. As far as Saurashtra is concerned, the project is expected to cover all the villages by December 2004 and March 2005.⁵ So far only about 15 percent villages have been covered. The progress of the project is linked with the construction of main pipelines. When a main pipeline is

⁵ This target has not been achieved till the end of 2005, though there is an increase in the number of villages covered.

constructed, the villages on both the sides are covered under the project. Also, many of the “officially covered villages” have not yet received the water.

- Water supply under the project is not always regular or dependable: The covered villages did not receive water regularly during the past three months; water supply is also not provided daily and the hours of water supply also are not regular or adequate to provide 70 lpcd in all the covered villages.
- According to people, the quality and taste of water supply are satisfactory. There are no major complaints about these from the villages.
- There are multiple sources of water in almost all the villages, and about 75 villages have one or more local sources of water supply. As expressed by many households, there is a need to explore the possibility of developing these resources.
- The norm of one water tap for 100 persons or the maximum distance of 150 m to water source are not observed in many villages for a significant population.

There are several lacunas in the rules or guidelines for the project –

- Water testing is a neglected area, as no adequate provisions have been made for water testing
- Water meters are not yet installed in most villages and there is no meter-based charges fixed yet. The water charges are very low, and these are not fully recovered. Any delay in this is going to make it difficult to charge people for water.
- There are no adequate provisions for disposal of used water in the rules. There is a need to pay attention to this aspect, as this water can be used for other uses.
- Purification of water needs to be done at the village level and not only at Main Head Works. The rules need to be modified in this area. Also, instead of leaving purification of water supply at villages to the sweet will of lineman / valveman, there is a need to make some rules
- Pani Samitis or local management of water supply also is a neglected area under the rules. There is a need to strengthen this, as it is critical for fair distribution of water, proper O & M of water supply at the village level, recovery of water charges etc.

The survey has also thrown light on some of the built-in weaknesses of a long distance pipeline project. These weaknesses stem from the project concept and design on the one hand and the socio-cultural and administrative culture in the state on the other hand.

- Breakages and theft of water supply in a long distance pipeline project is difficult to prevent, particularly in water-starved regions. No amount of policing is going to help on long distance pipelines.

- Leakages and poor maintenance of long distance pipeline also is an issue for technical and administrative capabilities in the state. Also, maintaining right pressures and right force of water supply through out 2700 km of pipeline requires a very high level of technical competence and management. Irregular electricity supply also is a cause of irregular water supply
- There are certain issues regarding the designing of pipeline for distribution. The system adopted under the NPP need some improvement (Hirway and Lodhia 2004).
- There is a need to encourage development of local water resources in these villages. Somehow this is not emphasized enough as revealed in our survey. In fact, there is no incentive for people/local bodies for develop local sources, which can provide water supply at low costs, and in the long run, in a sustainable manner.

In short, a lot needs to be done: (1) Regular water testing needs to be organized under the project, (2) water meters need to be installed in each village so as to organize volumetric water charges for Narmada water, (3) there is a need to organize provision for disposal of used water and (4) there is also a need to organize treatment of water at the right levels. Though Pani Samitis are expected to play a major role under the NPP project, the project has a long way to organize such Samitis for efficient water management at the village level.

Dissemination of the findings to various stakeholders

On the Right to information day on 28th September 2004 a pamphlet was designed containing the findings of the first round of survey details. This pamphlet was distributed in more than 1500 villages and awareness about the study was done at the regional level.

A meeting with the Government officials was organized twice during the project period the details of the members present is as given below

Month	Event	Venue	Government Participation
September 2004	Sharing of findings of the first round of survey	Ahmedabad	Only one participant from Government
April 2005	Sharing of the findings of the third round of survey	Office of the Secretary – Water supply	Entire officials of the Water supply department

The information sharing with the Government has been quite positive as we have found the response from the Government quite positive to accept the realities. They also shared our concerns over other issues which are related to the distribution system like having a water meter at each village. Pricing on the water that is being supplied and formation of Pani samiti (village level institution to manage the Narmada water).

The first meeting with the Government officers was organized in Ahmedabad. This meeting was attended by almost all members of PRAVAH who were involved with the study, as this was for the first time that a survey was done in 1300 villages in one month's time. This is possible only with the networks that have its member organizations spread all over the state. However one learning that we had was that the sharing of information with Government officials has to be done at their offices and not at some other places where they are not likely to come.

The second meeting with the Secretary – Water Supply was organized at Gandhinagar and all the Executive Engineers, Superintending Engineers and Chief Engineer as well as the Member Secretary of the Water Supply Board were present. The outcome of this meeting was:

- The Secretary appreciated the efforts made by PRAVAH & CFDA to take up this monitoring task and completing it successfully.
- He suggested that more such meetings should be organized to share this information on a regular basis.
- Efforts undertaken by Government would also be shared with the participating members
- A meeting should be organized to share the final report of the CMS.

During the month of April 2005, the two round of surveys were completed and the comparative report for both the rounds were prepared, it was decided to share this information with the villages which have participated in this study along with the local organizations. More than 1500 copies of the report have been sent to these villages and many of the Panchayats have approached the regional centers of PRAVAH.

Lessons learnt

- The debate on the feasibility of large scale projects involving huge finances has started at all levels
- The discussion of rights based approach in drinking water and sanitation could be established by setting up of a mechanism to give feedback on the progress of any programme by the community
- The voice of people can be made heard to the policy makers through CMS
- The importance of the local source development in drinking water has to be focused upon
- The time spent on having clarifications on the schedules has been quite helpful in building the capacity of the NGO and its volunteers on Narmada based drinking water pipeline project
- The entire approach has been to ensure that maximization of the investment done so far at the same time bringing the ground realities in front of the policy makers.
- The communities have been quite interested in participating and cooperating with the partner agencies for collection of data but at the same time the limitation of capability of a field worker to get the kind of data using various tools for investigation has to be accepted.
- The project is one of its kinds in the country because covering approximately 1300 villages in a short span of one month
- The methodology adopted for the project has been participatory at all the levels
- Many of the organizations had to be oriented and re- oriented by PRAVAH about the importance of the project.

- At places some of the organizations had backed off from data collection and as a result the regional centers had to organize other agencies to complete the survey, this took some time and hence the delay in the last round.
- Turnover of the staff entrusted in doing the survey was also found to be a major hindrance in timely completion of the survey work
- The issues of Water Quality - Quantity and Frequency still have to be addressed

Future Actions

Through the civic monitoring, PRAVAH has demonstrated how communities can be involved to monitor programmes which would be implemented for them. It has been shown that participatory approach has to be incorporated in -planning the programme, implementation and post-implementation of the programme. Stakeholders like Communities, Government officials and NGO's have a role to play in the projects like the NPP.

PRAVAH would like to disseminate the information of this CMS to various stakeholders like the Government, Gram Panchayat and other NGOs. We believe that this would definitely lead to improved implementation of the project, which will take water to people.

Pani samiti which is to be formed at the village level to manage the distribution of the water in the village has not been formed at many places. These village level institutions will have to be strengthened for effective management of the pipeline project in future.

The Water Charges will have to be paid for the water, used. This reality is to be accepted by all the stakeholders. At many places during the survey, it was found that Gram Panchayats are not willing to pay the water taxes. However the clarity in the institutional mechanisms will come over a period of time. Secondly, at some places the Gram Panchayats have shown readiness for paying taxes provided they get adequate- timely supply of drinking water on a regular basis.

The installation of Water meters at the village level has to be brought about by educating the people about the importance of this water. As seen in one of the case studies conducted during the period, Narmada water was wasted with want of "one tap" which was to be fitted by the GWSSB. The staff employed by the Government has to maintain the records of the water received and distributed, this was found in another case study during the project period.

Another future action will be to organize Jan Sunvai- Public Hearing on the progress of the project on a regular basis. This kind of Public hearings would lead to larger debates on the importance of local source- community based planning of drinking water projects.

Sanitation has been identified as one of the major issues which have been missed out completely under the NPP. Villages need to have proper system of disposal of used water. To sum up, the civic monitoring has contributed significantly, right from awareness generation at the village level to meaningful policy dialogue between people and policy makers at the state level. It has also shown how researchers and activists can collaborate meaningfully in improving the implementation of a large project like the NPP.

[Please contact PRAVAH at pravah@rediffmail.com and CFDA at cfda@icenet.net]

Selected References

Hirway Indira and Subhrangsu Goswami, Reports of the Civic Monitoring of Namada Based Pipeline Project for I to IV rounds. The final report is being finalized.