

Government of Gujarat

PIONEERING

THE COMMUNITY-MANAGED APPROACH

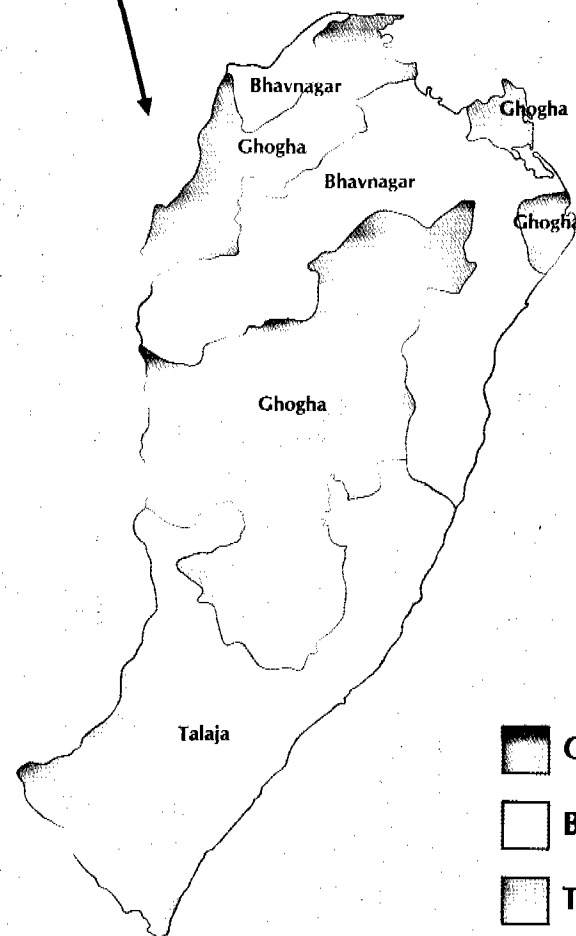
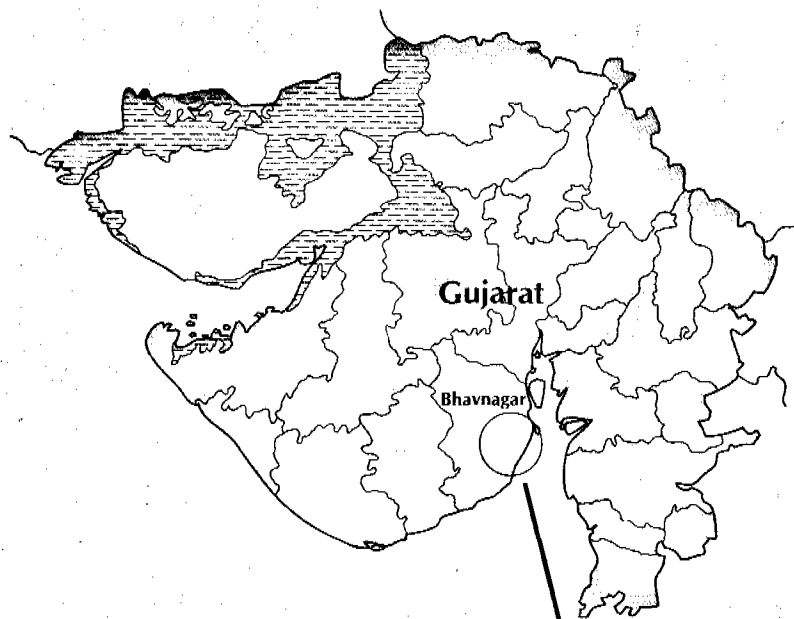


GHOGLIA REGIONAL WATER SUPPLY AND
SANITATION PROJECT

GUJARAT

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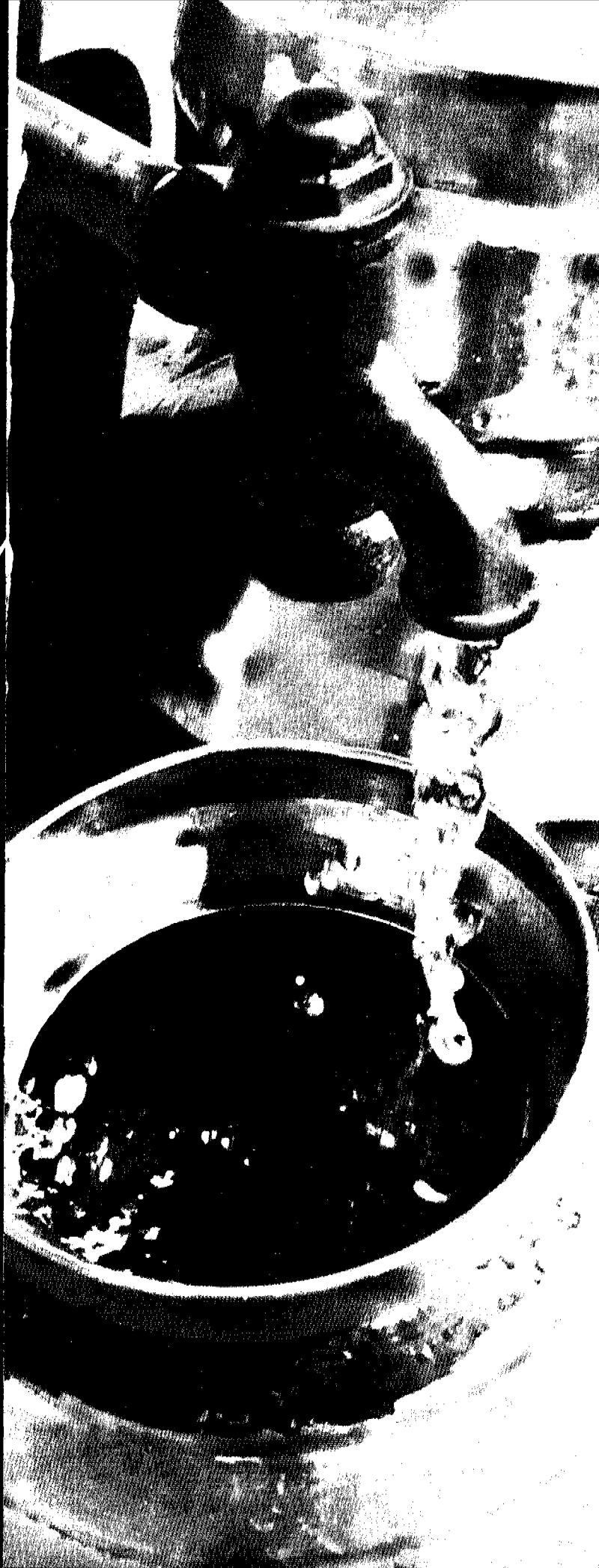
Project Area



 Ghogha Block

 Bhavnagar Block

 Talaja Block



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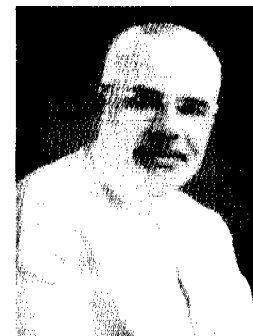
Based on work done by Pani Samitis, ISAs, GWSSB, and WASMO teams



सत्यमेव जयते

Narendra Modi

Chief Minister,
Government of Gujarat



Foreword

It is heartening to witness the community efforts for demand-driven decentralized approach for the development of water supply and sanitation systems in rural areas of coastal Ghogha region. Community participation in the sector has provided vital insights in the areas of transparency, progressive mindset, innovativeness and combined efforts. Local self-governance on the theme of "**for the people, by the people and of the people**" has provided a win-win situation for the community and the government. The trend-setting lessons from invisible leaderships and effective use of power of society have provided the government an express highway to community-managed water supply infrastructure which will be sustainable, as it has been built on mutual trust and has got a strong ownership feeling amongst the community.

The Ghogha Regional Water Supply and Sanitation Project (GRWSSP) was the first attempt of the state to pursue the participatory and people-oriented sector reforms. It was initiated on a pilot basis in 82 villages of the Ghogha region. This project was a rich learning experience and became a beacon for universalizing the reforms. With capacity building and collective decision-making, the communities became true managers of their in-village water and sanitation systems. The project showed the strength of the people, and the success that could be achieved when they joined hands with the government. The villages proved their concern for equitable and sustainable use of water resources by fully paying the operational and maintenance costs of running their water supply systems.

Now, after the experiences from Ghogha project, the state is positioned to pursue the community-managed approach in a mission mode. The approach has been extended to all districts of the state and a very enthusiastic response is emerging from the community and PRIs. I must compliment and congratulate the project villages in leading the way for this reform process. The financial as well as advisory role of the Government of Netherlands for the project has also to be appreciated.

The growing understanding and consensus among the people about the prudent and sound water and sanitation management is all set to pave a new path in the state. This book is an attempt to capture the insights gained under GRWSSP about how rural drinking water and sanitation systems can become a joint venture between the state and the people.

March 2006

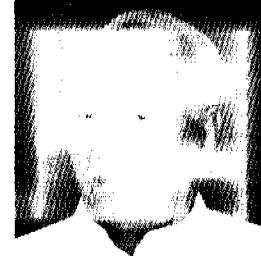
(**Narendra Modi**)



सत्यमेव जयते

Narottam Patel

Minister (Water Resources and Water Supply),
Government of Gujarat



Preamble

I compliment the people of 82 villages of Ghogha Regional Water Supply and Sanitation Project (GRWSSP) for not only completing the project in a pragmatic way, but also providing vital lessons for scaling up the community participation in village-level water supply infrastructure development and management. Built on their confidence, the state is now replicating the experiment in all districts. The government is committed to ensure safe and assured water supply to all and huge investments have been made during the recent years for bulk water transmission to water deficit areas of the state for making the sector drought proof. Efforts of the government alone will not suffice. With this in view, community involvement since project inception to its operation and maintenance (O&M) was envisaged for intra village infrastructure and the results have been successful. The major lessons from this experience have been the social amity, equity in distribution, care for under-privileged, conservation of the resource, socially agreeable tariff plan, better hygienic practices and care for traditional water sources.

With the above experience, social dimension in the form of a strong sense of ownership has been added to the engineering solutions for the drinking water issue. People's participation is now becoming increasingly necessary for sustainable development and reforms in the sector. The mission approach of the state can only be realized when both the government as well as the community continue working together as partners with trust, commitment and resolve. This has been amply demonstrated under the project. The book presents insights gained in GRWSSP so that they can be further replicated and have a multiplier effect.

March 2006

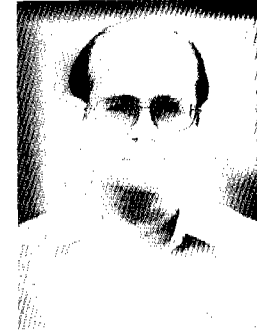

(**Narottam Patel**)



सत्यमेव जयते

S. G. Mankad

Chief Secretary,
Government of Gujarat



Preface

Traditionally, we have depended upon Government to provide all civic services like cleaning of roads, disposal of garbage, drinking water, water for irrigation, primary education and health services. When Panchayati Raj was introduced in early sixties, the responsibility of management of these services was given to the local elected Panchayats. Experience of last forty years has shown that while in many cases Panchayats have managed essential services successfully, in many other cases, they have not been able to do so, either because they lack resources or management capability.

Experience has also shown that where citizens themselves decide to maintain service, be it management of mid-day meals in primary schools, collection of milk or distribution of water for irrigation, they have done it efficiently and at a lesser cost. They have also been able to collect user charges which local elected bodies find difficult to do.

Gujarat Government has tried to facilitate community management of rural water and sanitation systems. Pani Samitis have been formed in more than 3,000 villages. The Pani Samitis are managed mainly by women and they have shown that they can manage water distribution systems efficiently and effectively.

The Ghogha Regional Water Supply and Sanitation Project was the first effort to involve community in management of water supply and sanitation. The Ghogha project has shown that there are many invisible leaders in the community, who, given the right cause and motivation can cause transformation in the life of village people.

The Water Supply Department of Gujarat Government has documented the experience of implementing the Ghogha Project in this booklet, which makes a fascinating reading. The booklet encapsulates knowledge and insights gained in the working of the project, and presents a model which can be adopted by the communities elsewhere for managing their own public services.

March 2006

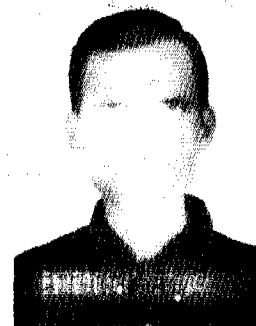

(S.G. Mankad)



सत्यमेव जयते

V.S. Gadhavi

Secretary, (Water Supply)
Government of Gujarat



Introduction


Over the years, the people of Gujarat have seen water problems mount - from the over-exploitation of ground water resources to the rising water quality problems. But in recent years, the people have also seen the state marshal its resources to meet these challenges. The paradigm shift in the water and sanitation sector has brought about an increased understanding that the threat of water scarcity can be successfully overcome when the government and communities work together. This shift in the sector through the adoption of the community-managed approach has brought in revolutionary change in attitudes and behavior of all the stakeholders.

The sector reforms aim at sustainable development and use of water resources. This drive for sustainability is rooted in the growing recognition of the important role of the communities in managing their water resources. Accordingly, the role of the government has changed from that of a supplier to a facilitator.

Special emphasis has been laid on community ownership of the water and sanitation infrastructure. When there is ownership, there is also an acceptance of responsibility. By enabling communities to own the new systems, a willingness to pay for their operation and maintenance is created.

The Ghogha Regional Water Supply and Sanitation Project was the state's maiden attempt to implement the community-managed approach. I find the response of the rural communities involved with the project most encouraging and reassuring. Important developments are taking place within the state to expedite the process of creating water security. The responsibility shouldered by the communities will certainly act as a catalyst and will render the state's efforts sustainable. The publication is an attempt to bring out the processes involved in capacity building of community and the lessons for replication and scaling up the reforms in this vital sector.

March 2006


(V. S. Gadhavi)



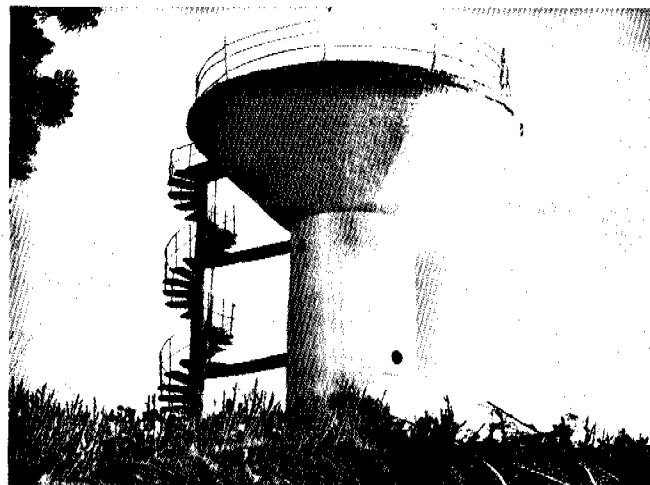
Today, the community-managed, demand-driven model in the water and sanitation sector is accepted as the preferred and standard practice. A little under a decade has lapsed in Gujarat since this paradigm gained favor among the various stakeholders involved with the sector. When the shift in approach from the supply-driven, government-owned systems to decentralized, demand-driven, community-managed systems was initiated, the transition was not easy or smooth. It was fraught with challenges that arose from an untested approach. The numerous trials and errors along the way led to a more refined, mature and committed reaffirmation of the community-managed approach.

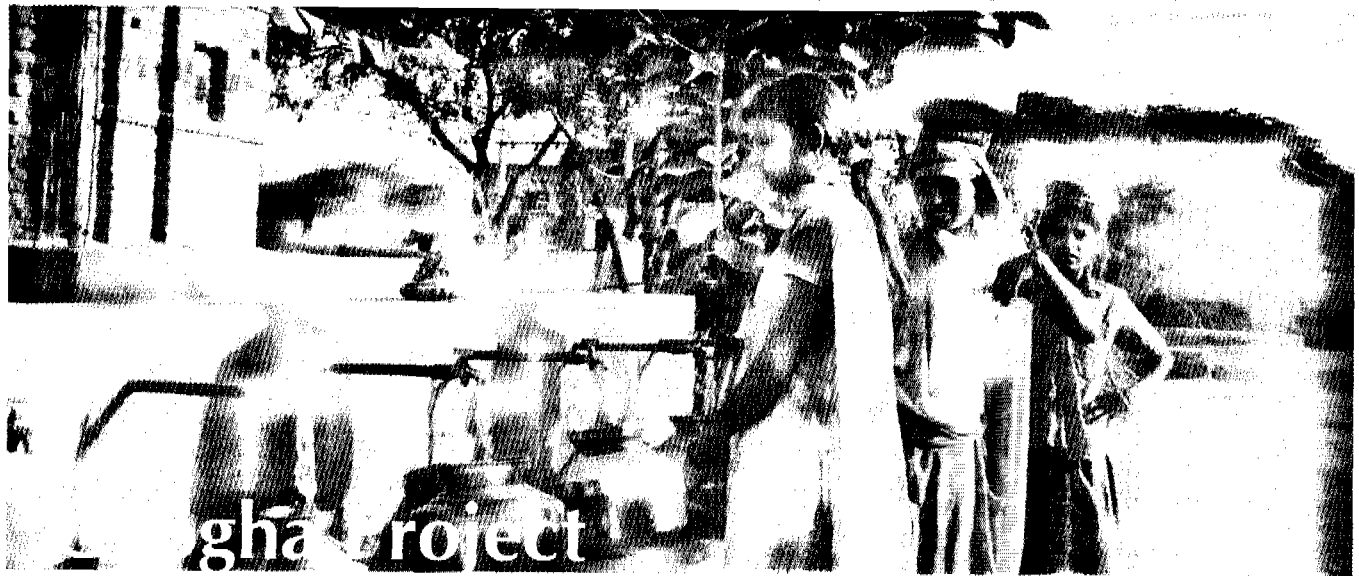
At the time Ghogha Regional Water Supply and Sanitation Project (GRWSSP) was conceived in 1997 in the state, the project was intended to be a testing ground for various approaches and methodologies. The project would aim at community participation with the integration of socio-economic, institutional and health dimensions into the engineering aspects of a water supply programme.

In the same period as the project, national reforms in the water and sanitation sector in the year 1999 ushered in change within Gujarat that advocated participatory methods and principles. The new sector reforms sought to bring in revolutionary change in the rural water supply

programmes that were hitherto supply-driven and did not yield sustainable results and tackle adequately the water crisis. These reforms that were introduced were based on the following principles:

- **Restructuring of institutions**
The role of the state would change from being a provider to that of a facilitator and promoter of water resource development.
- **Enabling financial efficiency**
Water was no longer considered a free good, but its use and provision would be governed by the cost recovery approach from users.
- **Community participation and decentralization**
Decision-making would be encouraged at the community level to foster sustainable and equitable services.





ghogha project

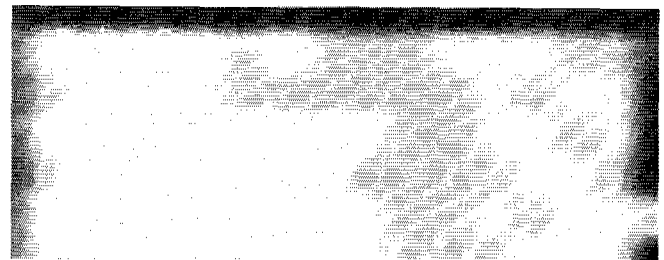
GRWSSP was initiated in 1997 and concluded seven years later, in June 2005. It was launched as part of the third generation projects under the Indo-Dutch Rural Water Supply and Sanitation programme. The project was implemented in the three blocks of Bhavnagar district - Bhavnagar, Ghogha and Talaja blocks - and covered an area of about 614 sq. km. There were 82 villages included in the project, with an estimated population of 167,747 people according to the 1991 census. The project area was selected on the basis of priority ranking on criteria such as drinking water scarcity, poverty levels, community interest in water and sanitation, and levels of investment in the area. The total fund provision for the project was Rs. 5960.41 lakhs, of which Rs. 5904.23 lakhs was utilized by October 2005.

Objectives

The main tenets of this project were:

- Safe and reliable water supply for communities at convenient distances
- Community-based operation and maintenance (O&M) and adequate cost-recovery for O&M from communities
- Improvement in the disposal of human excreta and increase in the coverage of household latrines
- Improvement in environmental sanitation, particularly with respect to waste water and solid waste disposal

- Improvement in household and personal hygiene
- Community involvement and management through strengthening and development of local institutions such as Pani Samitis, and working through existing institutions such as the panchayat, NGOs, and health and education services
- Improvement in village level management of water resources
- Enhancement of institutional capacity in technical, social and management aspects to facilitate and support the project





Chronicing the Project: The Two Phases

The history of Ghogha project consists of two phases. The first phase was from inception to the reorganization of the project in 2002. The Gujarat Water Supply and Sewerage Board (GWSSB) was the lead agency for implementing the Ghogha project during this phase. The difficulties faced in adopting the community-managed approach in Phase I led to extended delays in completing the project works. A mid-term review of the project found the need for extensive institutional restructuring. This led the project into its second phase, which began with the establishment of Water and Sanitation Management Organization (WASMO) in 2002. The great deal of time that was lost in the first phase however, could not be compensated even in the second phase. It was realized by the Mission meant to make the final project assessment report that the project would have to be continued for another six months, beyond its original termination date of December 31, 2004.

GWSSB and Integration of the New Approach

GWSSB had been established in 1978, with the primary responsibility of water supply and focus on technical aspects. When the Ghogha project arrived, it was supported by NGOs who had been invited to partner with it in areas where it did not have the required abilities. Unfortunately, due to no clear definition of roles, there was much lacking in these partnerships. GWSSB was unable to re-orient its working to incorporate the software activities that had been mandated into the project. In particular, much against the essence of the project approach, the organization

had not been geared to treat the village communities as active partners and was often not able to respond with flexibility while working with them. GWSSB also had its focus on regional schemes rather than individual, village-level ones. Moreover, the other components of the project, such as WRM, environmental sanitation and hygiene promotion were beyond the scope of the organization and the systems and staff of GWSSB was not able to work adequately in these other areas.

Establishing WASMO

The last decade had seen heavy investments in the state for bulk water supply to villages to tackle water scarcity. Structural changes in the sector thus assumed importance and sector reforms that aimed at community participation were initiated. The period also marked growing instances of willingness by civil society that communities could get effectively involved in the water and sanitation sector.

The Ghogha project already had a Community Management Support Unit (CMSU) set up in Gandhinagar to integrate the lessons and experiences from the project into other similar programmes in Gujarat. An Institutional Mission for the project and CMSU concluded that there was a need for a new organization that was more independent and had a wider scope. It was anticipated that CMSU in its existing form would not be able to facilitate reforms in the sector. An organization that would work beyond the framework of the Ghogha project was required.



Ghogha Project

As a result, WASMO was established in May 2002, by the Government of Gujarat, with institutional support from the Royal Netherlands Embassy. The organization was formally registered under the Societies (Registration) Act, 1860 and the Bombay Public Trust Act, 1950. WASMO would be a platform for the convergence of efforts of the government, NGOs, community-based organizations and research institutions for implementing the decentralized and community-based approach to the rural drinking water supply and sanitation sector. The organization had a role to play in four major areas:

1. Management and sector monitoring
2. IEC, institution-building and networking
3. Promotion of new technologies and innovations
4. Policy development

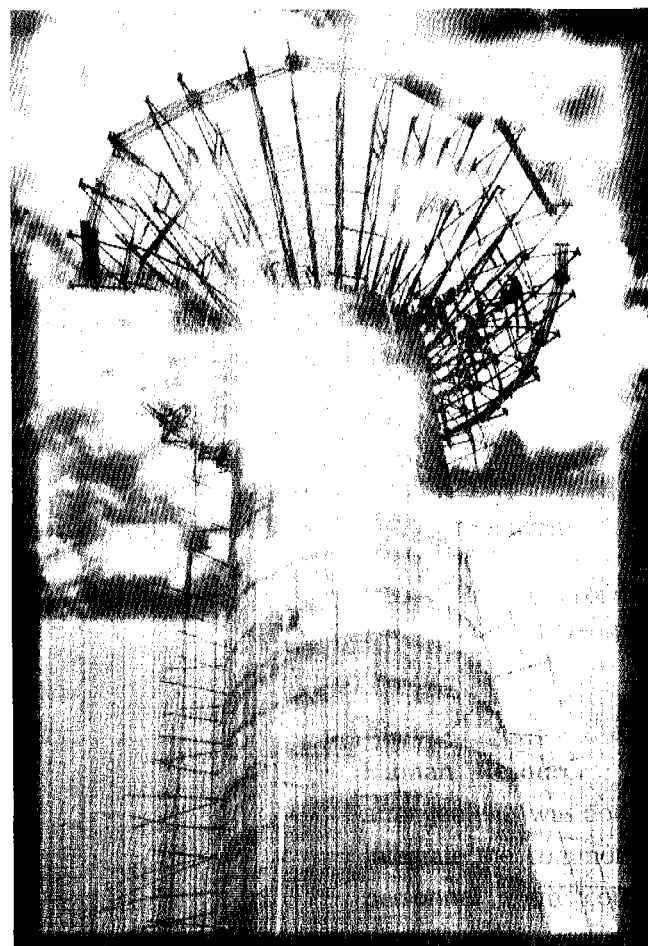
Major Changes in the Second Phase

Human Resources: Over-hauling of institutional arrangements was done by WASMO in a major way to integrate the community-managed approach. All new personnel were contracted so as to have multi disciplinary teams with people from the fields of social sciences, management, environmental sciences, and media along with existing engineering personnel.

Water Supply Sources: The strategy in the first phase was to develop local village water sources with provisions for connecting village distribution systems to future regional



Ghogha Project



pipe schemes. An intensive drilling and well-testing campaign was conducted where over 220 boreholes were drilled. After the campaign, it was found that due to over-exploitation of ground water, local sources would not be able to provide water security. The strategy for the second phase was to facilitate multiple sourcing, with local sources as the primary sources wherever possible. The Mahi pipeline would supply water to villages that lacked a reliable local source and would provide backup supply to other villages for water security.

WRM and Pastureland Development: Both these components were added in the project in the second phase. It was realized that ground water recharging was necessary, and structures such as check dams, percolation wells, and recharge tube wells needed to be built. Budgetary provisions for WRM activities were thus made in the project in the second phase. Activities for pastureland development were also added for retaining ground water through plantations and for fodder

production for the village livestock.

Pani Samitis: In the first phase of the project, the Pani Samitis were formed in accordance with the Government Resolution (GR) of 1995. These Samitis were required to have eight members, with three from the panchayat. It was necessary to have only two women members. The sarpanch and the talati were the de facto president and secretary respectively. The term of the committee was the same as that of the panchayat. The second phase saw the restructuring and expansion of the

Pani Samiti to 10-12 members, according to the amendment in the GR in 2002. The committee had tenure of two years, and this tenure did not have to coincide with that of the panchayat. The inclusion of women increased to one-third of committee, and there was a proportionate representation of marginalized communities. It was not mandatory to have the sarpanch as the president of the Pani Samiti. Unlike the first phase where the panchayat had a say in the election of the committee members, in the second phase, the members were nominated and ratified by the gram sabha.





The Ghogha project pioneered the process of making reliable and clean water reach the rural populace. Along the way, there were a number of difficulties faced on various fronts. For example, penetrating the Durbar community was not easy, and the project personnel were also in the learning mode, trying to grapple with the community-managed approach. Yet, throughout the implementation process, there were efforts to overcome inherent weaknesses in institutional arrangements, methodologies and project provisions. The sections that follow are an attempt to capture and outline some of the important milestones.

New ground was broken in the use of approaches and technologies that better suited the water and sanitation sector.

Physical Project Achievements	
Item	Output
Elevated Storage Reservoirs	84 with total storage capacity of 42,65,000 litres
Storage tanks	84 with total storage capacity of 66,20,000 litres
Overhead connections	100
Stand-posts	100
Washing and bathing facilities	100
Cattle troughs	100
Pastureland development	656 Ha.
Construction of soak pits	100
Installation of drains	100
Demonstration latrines	100
Toilets constructed with individual latrines	100
Distribution of water quality testing kits	83

Beginning of Dual Water Supply Sources

Under the original project agreement, local ground water was to be the main source of water supply in the villages. The project had factored in external piped water systems only for no-source villages. Since its inception, however, the project was subject to differing views with respect to the water source at the village level. While the state government believed that an external source was necessary to complement the local sources for facilitating water security, the Government of Netherlands maintained that it would be more sustainable to use local ground water resources with adequate measures for augmentation and greater user involvement.

The confusion and conflicts in the water sources took its toll on the project and resulted in many delays in the first phase of the project. The major consequences of the confusion were that GWSSB was reluctant in implementing the project, and that the Implementation Support Agencies (ISAs) could not mobilize the communities as intended because water was not available.

After many efforts to augment local water sources through the well-drilling campaign, it became clear that external water supply system would be necessary. Experience on the ground revealed that the local sources would not be able to provide water security in the villages throughout the year, and would need to be supported by external supplies, especially in the pre-monsoon period. As a result, the project agreement was later revised, and GRWSSP became a dual source project. Two parallel strategies were subsequently applied, where first, optimum use was made of existing facilities and local ground water sources. This was then complimented by a piped water supply scheme that would later be connected to the Mahi pipeline when it became operational in the project area.



Communities and Construction



The Pani Samitis were designed to be the main vehicle for community participation and management in the project. With regard to the construction of village water supply and sanitation works, in the first phase, Pani Samitis and the communities at large were involved in activities such as site selection, cost recovery, preparation of village action plan and construction monitoring. The actual construction of the works was done by contractors selected by GWSSB. The contractor would decide and prepare the implementation plan which would be shared with the community and

GWSSB. The community would lend support to the contractor and would monitor the works. Any change in the construction plan or schedule would be conveyed to the community and the Board. Once the schemes were completed, they would be technically tested and then commissioned to the Pani Samiti.

In several villages however, there were frequent conflicts between the communities and contractors. The contractors were unable to appreciate and acknowledge people's role in the project. There were also problems of lack of transparency as people had a feeling that local officers were on the side of the contractors. By the end of Phase I, contractors had constructed village water supply works in 42 villages. In the remaining villages, the works had been awarded to contractors, and were under progress.

Nesvad village brought in change in the status quo when its panchayat undertook the physical construction activity. This village illustrated the fact that when the people became involved in the construction, there was a greater sense of responsibility and empowerment, besides other collateral benefits such as cash wages. After Nesvad, other villages too began to come forward to undertake their own construction as they believed they could do a better job.

The second phase of the project marked a shift in the implementation strategy, with the Pani Samitis of the remaining 40 villages managing their own construction works rather than the contractors. In time, the villages that had constructed their own structures proved that they could adhere to the same quality standards that was set for the contractors and could also work within the same time frames. As a result, in the other projects implemented by WASMO, the Pani Samitis have the choice between undertaking their own construction and giving it out to contractors.

Household Connections

Most of the village water supply systems in the first phase of the project were stand post-based piped supply. Handpumps were installed for the remote settlements or where it was found feasible and was in demand. In most cases, household tap connections were not advocated under the project.

In villages where household connections already existed, there was little interest shown in the upkeep of the stand posts. It was found that communities aspire for household connections rather than stand posts. Since they do not perceive great improvement in the standard of services and comfort levels with new stand posts, their willingness to pay their share of contribution in the project is adversely affected.

To amend the situation, the latter phase of the project allowed household connections. Although the responsibility of getting the actual connection belonged to the households, wherever the village demanded, the project provided for the arterial distribution lines that were fitted with opening valves at regular intervals. The valves ensured that the lines were not punctured when the people asked for individual connections.

The inclusion of household connections greatly increased the motivation levels of the communities to contribute O&M charges and maintain their structures. To avoid problems of wastewater disposal, a condition was laid that the household would at least have soak pits if it wanted a tap connection.

Towards providing urban amenities in rural areas



Project Milestones

Creating Awareness about Water Quality



Due to multiple water sources within most villages, the communities involved with the project have the option of choosing their source. Since local sources are able to provide adequate and reliable water supply seasonally in a good monsoon year, preference is usually given to these sources, particularly because water from local sources does not carry any charges. Typically, the external piped water from Mahi is required for only about 1-3 months of the year, during the summers. The per capita annual cost of the Mahi water is Rs.14.

The local sources most frequently used by communities for domestic and drinking purposes are open wells and ponds. While it is important to maintain these sources and ensure that they continue to yield sufficient water, there is no surety about their water quality. Pani Samitis tend to base their choice of water source on costs, and quality aspects are often not factored into the selection process. In the latter phase of the project, it was found that more concerted efforts needed to be made to generate awareness regarding water quality. The people had to be informed about the necessity of safe water for drinking and the rationale behind paying for this water.

To generate awareness, samples of drinking water from all 82 villages were collected in 2004 for detailed chemical and biological analysis. Wherever the water was found to be unsafe, the villages were advised to take appropriate measures. Kits for on-field water quality testing were also subsequently given to Pani Samitis.



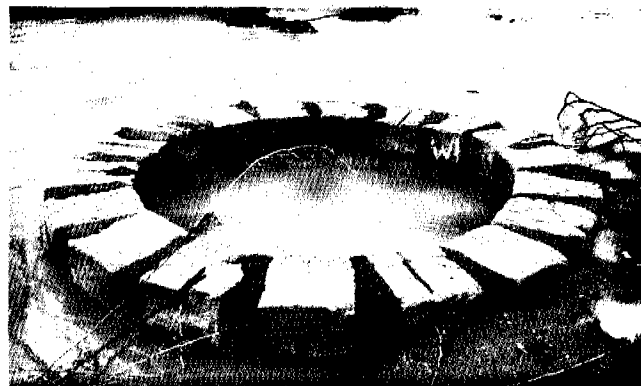
As water quality issues and its correlation with water tariffs are now coming to the fore, other WASMO projects have begun to address them in the earlier phases of the project cycle. A Water Quality Cell was established by WASMO in July 2004 to institutionalize a water quality surveillance system to ensure that the people consume safe water. Workshops, demonstrations and trainings are held regularly to enable the people to decide whether the drinking water used by them is safe or not, and also the repercussions of consuming unsafe water.

Water Resource Management

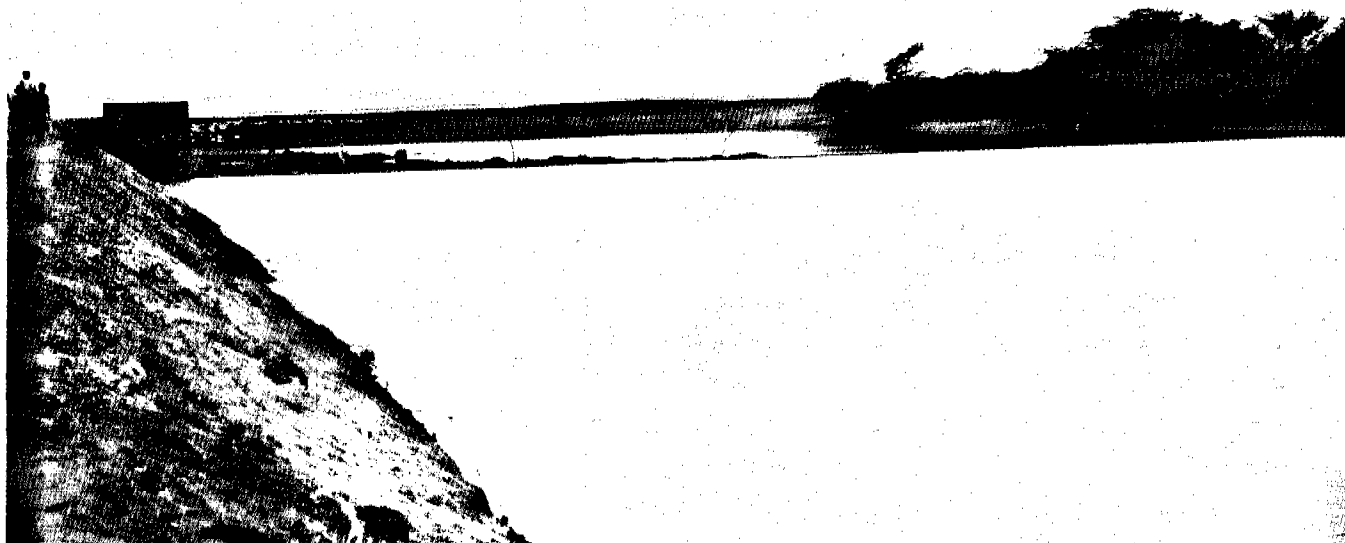
Local water bodies have been the prime water source in the Ghogha project, and ensuring their sustainability has been of paramount importance. Water resource management (WRM) would help address quality and quantity issues for drinking water. The communities were aware of the benefits of WRM and some villages had existing WRM systems for drinking water and agricultural benefits. This notwithstanding, the WRM component in the project did not receive its due emphasis as these activities were not budgeted for in the original project document. It was only in April 2004 that the first proposed activity was implemented. The communities had to contribute 10% of the capital costs, unlike the village water supply works, where their contribution was not mandatory.

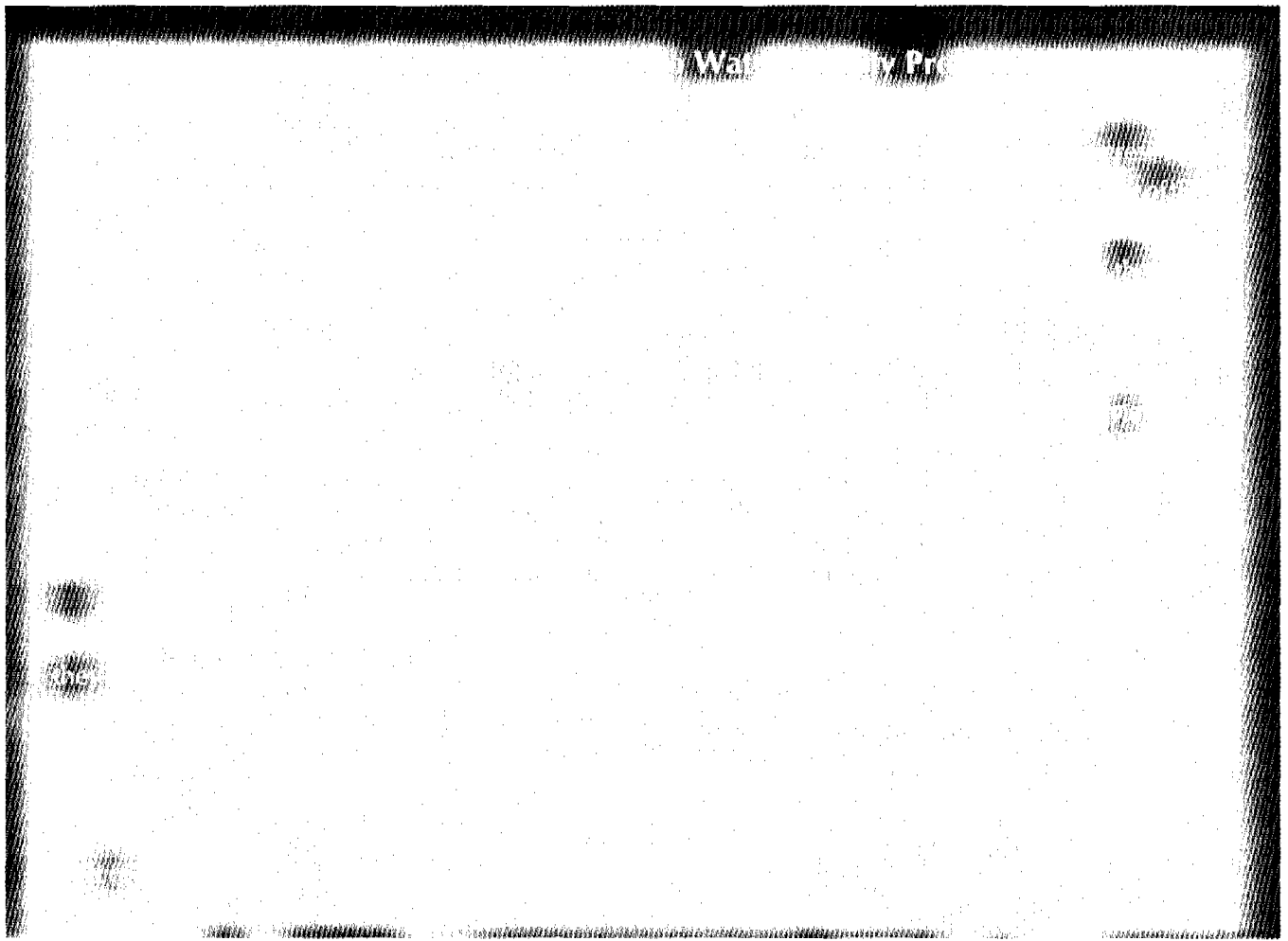
Once the WRM activities began to be implemented on the ground, the response of the people was positive. The component gained favor among the communities for several reasons. Above all, it would bring about a rise in the water table that would be beneficial for the farming populace as well as for the drinking water requirements of the village. The Pani Samitis were involved in all WRM works, except for nala and gully plugs, which were facilitated by the Forest Department.

The major learning for WASMO was that all future projects needed to include the WRM component at the project formulation stage itself. The impact on quality and quantity of water re-established the importance of harnessing water.



By the end of the project, 75 checkdams, three tidal control structures, and 45 ponds had been constructed across 58 project villages, with a total storage capacity of approximately 45,65,200 cum.





Project Milestones

Tackling the Sanitation Challenge

Water and sanitation go hand-in-hand, and both aspects need to be addressed in a project whose principle aim is to improve water supply. There is greater vulnerability to water-borne diseases when there is an increase in water consumption and the accompanying waste water that is generated. For this reason, sanitation improvement has been part of project objectives, with a focus on environmental sanitation and improvements in the disposal of human excreta.

Baseline findings showed that the status of household and community sanitation was poor in the project villages. Only 3-5% of the households in the project area had latrines. Open defecation was the norm, and even many primary schools lacked sanitation corners. Low hygiene levels led to high prevalence of diseases such as diarrhea, dysentery, malaria and gastro-enteritis. The average medical expenditure per household over three months was found to be as high as Rs. 3500. This amount included expenses over doctors, medicines and travel to hospitals.

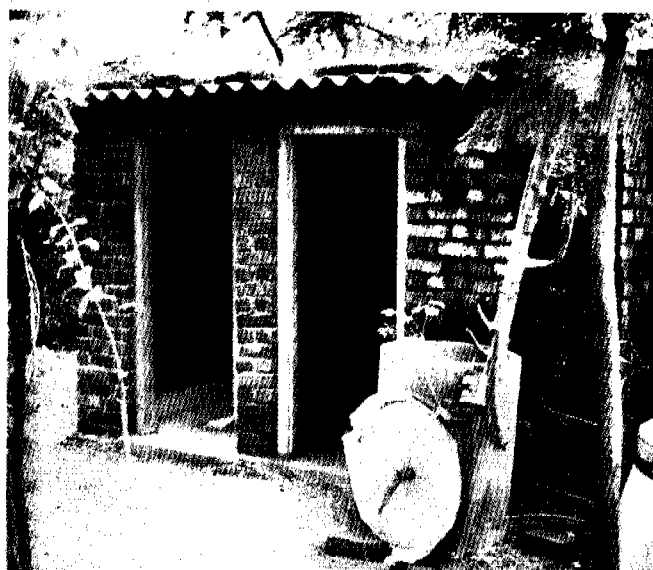
The large number of soak pits that were constructed across the project villages has been responsible for arresting the flow of waste water that used to frequently run into the streets. Over 300 demonstration soak pits constructed in the first phase spurred greater demand in

The major components implemented under the project have been the construction of soak pits, centralized waste water disposal system, demonstration latrines, school sanitation corners and the installation of dustbins.



the villages in the subsequent phase. As a result, more than 22,440 subsidized soak pits, with a functional design were built by individual families. Where soak pits were not feasible due to rocky terrain or larger habitations, the project attempted to experiment with centralized and partially open waste water drainage systems in a few villages.

To combat the practice of widespread open defecation, the project constructed demonstration latrines and helped set up sanitation marts. One of the ISAs, Utthan, also set up a revolving fund for loans in its project villages to encourage the construction of individual toilets. In total, 6447 latrines were built during the project period.



Project Milestones



To instill personal hygiene habits in children, the project envisaged the construction of school latrines. WASMO, on demand from various schools, initiated the provision of sanitation corners for primary and secondary schools. Each sanitation unit typically comprises of urinals, toilets and washbasin. With the construction of the units, it was realized that care had to be taken in design aspects so that the sanitation corners were user-friendly for children of different age groups. By the end of the project, about 150 sanitation corners had been built, covering all primary schools in the project area. The maximum benefit was probably derived by girls, whose drop-out rate from schools decreased.

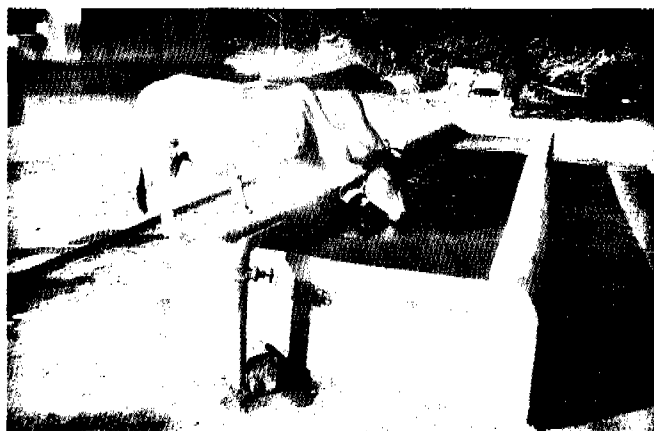


Project Milestones

Community Facilities

Community Washing Facilities

Washing facilities have been intended to be useful for women, as it provides a space for cleaning clothes. Experience proved that design and structural details, among other factors, had a great bearing on the use of the facilities. The Ghogha project experienced a breakthrough by the end of the project period in creating appropriate facilities that could be widely used by women.



Pastureland Development

Pasturelands in the Ghogha region were in a degraded condition, either covered with *Prosopis juliflora* or weeds. Development of such lands was done through the uprooting of unwanted plants and micro treatment of each site. The grass and fodder species that were subsequently cultivated were determined for each specific area. Some of the major advantages of pastureland development have been the rejuvenation of wastelands and the increased availability of fodder. The grass species that are planted have high moisture-retention capacities, and thus also contribute to WRM. In some of the villages, the cultivation of fodder varieties has enabled the communities to generate income. In total, the project has covered 658 hectares of land in 36 villages under this component.



Cattle Troughs

The cattle troughs made under the project have proved beneficial for both, the livestock as well as the herdsmen. The troughs are open, rectangular reservoirs and are particularly useful in the summer months.



Involving People in O&M

Under the Ghogha project, the communities had to bear the full O&M responsibility of the VWSS works, while the project would fund the capital costs. For the WRM and sanitation components, complete O&M and partial capital contributions had to be made by the communities.

At the time of conceiving the project, paying for water was a new concept, both for the people as well as the government. The concept had to find acceptance among the communities, and the government had to devise the structure and pattern for cost recovery. What was realized since the beginning was that proper O&M systems were the single most important aspect for project sustainability. If the people did not manage their assets adequately, it would not be possible to achieve water security.

The collection of O&M charges met with several deadlocks and challenges, as well as encouraging evidences. The O&M tariffs were calculated at the beginning of the project, during the technology selection phase. Work would commence only after the community had collected an O&M fund that was equal to 10% of the capital costs.

In actual practice, the smaller villages found it difficult to meet the 10% requirement, as the per head or per family contribution became high. In many villages, the communities were not convinced of the O&M estimates, and felt that they could lower the costs. It was thus necessary to ensure more realistic calculations of the O&M tariffs. The long implementation period and the delay in the construction activities also led to skepticism about the project and increased the reluctance of the people to pay.

In many villages, the members of the Pani Samitis were the first to contribute. There were several instances where receipts were given even before the payments came in, so as to induce the people to pay. Social pressure was the main motivating force for ensuring that payments rolled in during the formative stages of the



project. Later, as the people began to understand its necessity, sensitivity to gender and equity issues also began to increase. They showed concern for the less privileged and backward classes by fixing differential low tariff rates. So far, more than Rs. 33.03 lakhs have been collected as O&M charges by the Pani Samitis in the Ghogha project area. Villages such as Gundi, Kobadi, Kolyak and Ghogha have managed to raise O&M contributions that far exceed the required amount. For instance, Kobadi has been able to garner 4.2 times more than is necessary to meet the O&M costs.

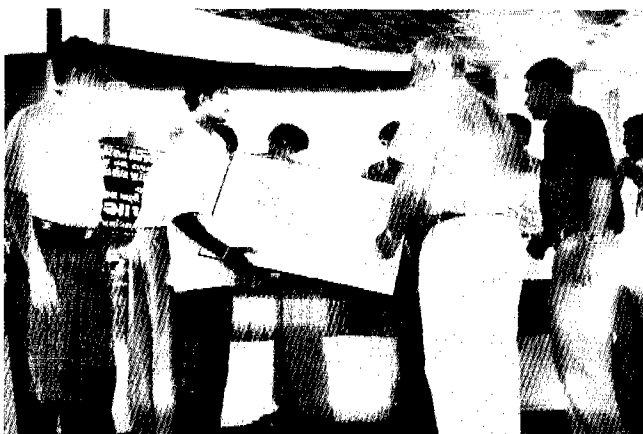
Today, the concept of cost recovery and O&M has evolved. As the communities have begun to embrace the idea of community ownership, they have also begun to pay for the capital costs in the subsequent WASMO projects. A shift has also been made in the O&M strategy. In contrast to the Ghogha project where O&M costs were estimated and collected at the start of the project, the other projects have entrusted the calculations to the people and the collections begin once the works have been completed.



Project Milestones

Atmarpan

The Ghogha project established a unique system through the Atmarpan ceremony for commissioning the completed works to the communities. This ceremony is conducted for every village to instill a sense of ownership of the village water supply and sanitation systems within the community. It is an elaborate process where all Pani Samiti members take an oath in front of their village communities and project personnel to operate, maintain



and manage the schemes. Since the ceremony is a public village function, there is a great sense of responsibility created among the Pani Samiti members to care for the village assets. Village maps, scheme design and layout, specification details, O&M information, and the Pani Samiti resolution along with a set of tools for minor repairs are also given to the village during Atmarpan.

The first Atmarpan ceremony was done for the six villages of Bapada, Garibpara, Chhaya, Pithalpur, Nesvad and Vavdi in May 2003. The success and response of this initiative was an inspiration to replicate this ceremony in all villages where works had been completed, including those that belonged to other WASMO projects. About two years after this first Atmarpan, in April 2005, a massive event, Lok Samvad, was organized in Bhuj, Kutch district. During this event, the Pani Samitis of as many as 285 villages took over their O&M responsibilities through the ceremony.



Clarity of Roles

The NGOs, known as Implementation Support Agencies (ISAs) were responsible for initiating, coordinating and organizing activities in the villages. They were involved with the project since the beginning, in January 1999. It was believed that ISAs would enable GWSSB to implement the community-managed approach. Initially, the first contract with the three NGOs (Center for Environment Education, Utthan and Medhavi) invited to partner with the project was for a period of one year. The ISAs would be responsible for community mobilization, awareness generation and capacity building in nine pilot villages. This contract was later reviewed so that the ISAs continued to work in the pilot villages through the completion of the project, and also expanded to the remaining project villages.

At the time Ghogha project was conceived, GWSSB did not have any experience in partnering with NGOs. When the ISAs entered the scene, they had some know-how in water and natural resource management, but were unfamiliar with the specifics of water supply and sanitation in a project such as GRWSSP. In the initial two years of the project, creating a partnership between GWSSB and NGOs was an uphill task. The experience revealed that a meaningful partnership required committed efforts from both sides and could not materialize on its own. The focus of the government and the ISAs was different - while the ISAs focused on communities and their development, GWSSB laid stress on physical targets.



Until the project entered into its second phase, the role of the ISAs was restricted to organizing Pani Samitis and the preparation of Village Action Plans. Lack of commitment and direct communication between organizations had contributed to the slow headway in the project. With the shift in the organizational structure and approach in the second phase, ISAs' participation became more meaningful. As insights were gained into the processes involved in a demand-driven and decentralized approach and the government and ISAs began to arrive towards a common platform, clarity of roles started to emerge. Capacity building and training programmes initiated by WASMO also facilitated change in the institutional environment. They not only helped in developing the relevant skill base, but also brought about attitudinal changes among the stakeholders where mutual respect was created.



Relevance of Processes

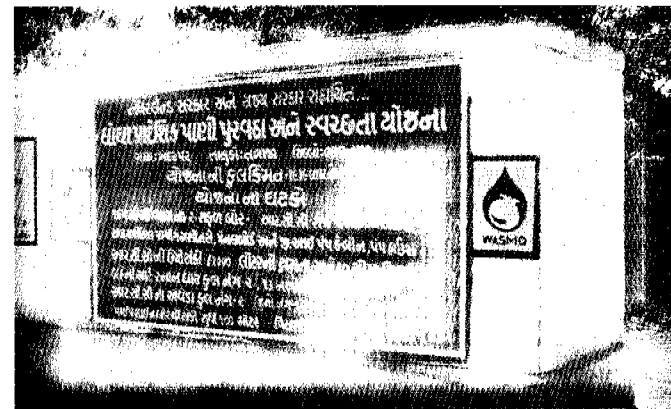
The start of the project was dominated by bureaucrats and engineers, who, inspite of intending to have people's participation, had little idea or expertise in making it happen. It can perhaps be said that it took about seven long years of trial, error and fine-tuning to get the processes right. Almost the entire duration of the project was a learning experience in establishing the correct combination of systems, processes timelines and targets.

Some of the processes such as community mobilization often took far too long. The physical progress of the activities was sometimes slow, and led to disheartenment and lack of faith in the project. One of the important stumbling blocks was that the software and hardware activities did not keep pace with each other. Such lags had an impact on the project and manifested in forms such as tensions and conflicts between stakeholders. The lack of clarity of roles between Pani Samitis, panchayats, and ISAs aggravated this situation.

It took time also, to recognize the importance of trust and transparency in a community-managed project, and then to transfer this understanding into creating appropriate systems. For example, several stakeholders did not believe that the Pani Samitis should be allowed full control of their finances. At the very least, it was believed

that the Pani Samiti members ought not to be the sole signatories to their bank accounts.

Yet, in a community-managed approach, the people are equal partners, and not 'beneficiaries' as is customary in many social sector projects. Further, the litmus test of this approach lies in how much financial control the communities have over their resources. Consequently, after many rounds of meetings and negotiations, a system which ensures transparency was established. The people's right to question in the gram sabhas and sharing the project with the communities helped create an environment of trust and confidence. The project laid down systems where the Pani Samitis not only had full control over their funds, but could also receive advances upto 50% so that they did not get trapped with contractors.



Project Milestones

Evolution of IEC Strategy

Information, education and communication (IEC) activities were an integral part of the project to actualize the sector reforms and implement the community-managed approach. However, the first phase of the project was marked by little coordination and planning for IEC between the ISAs and the government. Cross-learning between the stakeholders, a crucial element in implementing a new approach, was non-existent.

Another shortcoming that was realized was that there was a lack of Documentation & Communication (D&C) personnel at the field level. This lacuna meant that participatory communication and needs assessment became more limited. Subsequently, D&C staff was included as part of the field team to remedy the situation. Later, all other projects also had D&C members in their field teams.

While the first phase essentially focused on creating awareness about water and sanitation through the painting of slogans and illustrations, the latter phase began to include other mass media channels such as print, TV and radio. In the second phase, IEC efforts intensified greatly to respond to project needs. In keeping with the principles of the community-managed



approach, a need was felt to expand the IEC methods by creating more opportunities for two-way communication for all key stakeholders. Exposure visits, training workshops and awareness programmes were thus organized. A bi-monthly newsletter, the Lok Samvad, was also introduced to reach out to the communities and other stakeholders. The Lok Samvad disseminated information, shared success stories, and elaborated on major water and sanitation themes. This newsletter continues to be published today and is also used for other projects.





As the Ghogha project passed through its various successive phases such as pre-construction, construction and post-construction stages, there was a need to develop appropriate training material for each stage. Initially, an external agency had been engaged to develop manuals and guidelines, but soon, this arrangement was not found adequate. Consequently, the in-house D&C team began to generate training material by itself, based on field requirements and experiences. In-house publications have had a positive effect as they are able to respond to project needs. Moreover, it is also possible to test this material on the ground and make necessary improvements. Today, the D&C team also develops IEC material for other WASMO programmes.

Among the milestones achieved by the Ghogha experience is the more complete inclusion of children in the projects. Focused interventions to address them were missing in earlier efforts and it was soon realized that they were an important target group. Enduring change in hygiene and sanitation practices could be more easily had if messages were specially developed for children.

Major IEC Interventions

Print Material

- Booklets
- Materials
- Handwritten
- Open
- Book

Other Interventions

- W
- Slog
- Distr

Project Milestones

Inclusion of Women

The Durbar community has a stronghold in the Ghogha project region. This community is characterized by strong patriarchal systems with aggressive or volatile tendencies. The women of this community live a cloistered existence, and are not allowed to frequent public places or travel out of their villages. Since water collection necessitates their moving out of their homes, contrary to the prevailing norm, it is the men who fetch water for their families.

This system, where the women are not part of water collection, led to unique situations when the project entered the villages. With the men as principle collectors of water, it was difficult to mobilize the communities and bring about gender equity within the project. It was discovered that since men fetched the water, they had access to some means of transport - bicycles or local vehicles - to help them in their trips to the stand posts. Sometimes children were also called upon to ferry the water. Moreover, the water that was fetched was only sufficient for catering to cooking and drinking needs. For bathing and washing, the women rarely had sufficient water within their homesteads.

With the entry of the project in the Ghogha area, Pani



Samitis had to have female representation, and so women also became members. Their participation in the early years of the project was largely limited, but nevertheless, slow changes in gender relations were brought about. The women had a placatory role to play in villages as they helped smooth out differences between communities. They also provided valuable inputs in the preparation of Village Action Plans.

Once the interventions were implemented, there was a definite positive impact on the women in terms of their time spent on domestic tasks, work load, household



water demand and hygiene practices. The increase in availability of water enabled water consumption to increase by almost 50 per cent. Availability of water meant that the women and children could bathe daily, and could even wash their clothes regularly. According to a project assessment report, the women from the Durbar households asserted that they are no longer dependent on men to collect water as they either have private connections or stand posts which are easily accessible. They also said that they now have more time for productive work, social activities and caring for their children.





WASMO's involvement with the water and sanitation sector has continued beyond Ghogha. Although the Ghogha project is now complete, the community-managed, demand-driven, decentralized approach is being implemented by the organization in other government projects within the state:

- Community-managed Water Supply and Sanitation Programme in Earthquake-affected Villages of Gujarat (ERR Project) in the four districts of Kutch, Jamnagar, Surendranagar and Patan since October 2002
- Swajaldhara Programme in 13 districts since 2003
- Sector Reform Scheme (State) in 11 districts since 2004

In the present context, there is no longer any ambiguity in the roles of the different partners. This is evident from the fact that WASMO has moved on to forge partnerships with as many 32 ISAs in the ERR Programme and 28 NGOs in the Swajaldhara Programme. Both programmes have developed and laid out the activities of the ISAs during the different project stages and a formal agreement is entered into by the organizations before the commencement of the project. Definite interventions for the capacity building of Pani Samitis have also been identified. In contrast to the Ghogha project during its initial years, there is far greater surety

and certainty about the roles of ISAs, Pani Samitis and WASMO at the start of the other programmes.

The long gestation period, the new approach and the experience of working with different partners has enabled WASMO to derive several lessons from the Ghogha project. These lessons have proved valuable while implementing other projects and have provided insights in aspects such as human and financial resources, process formulation, role clarity, communication and transparency. Some of the important lessons are encapsulated below.

1. Selection of Villages

The Ghogha project had identified 82 villages from Ghogha, Talaja and Bhavnagar blocks for interventions. Although the project was essentially supposed to be



demand-driven, there were no provisions made to allow for redefining the project area in case it was found that there was insufficient demand in some of the selected villages. Care was taken by WASMO in the subsequent ERR and Swajaldhara Programmes to maintain flexibility in village selection. Both projects have provisions for excluding those villages that give little response to the project, and including those that demonstrate their readiness for interventions.

2. Conjunctive Use of Water

The tumultuous process of determining the water sources in the Ghogha project was an important lesson for WASMO. It brought out the need to determine sustainable water sources at the outset of the project. It was realized that in part, the sustainability of the drinking water supply system would depend on the sustainability of the source. This was done in the Ghogha project by using the local sources and backing them with bulk water transfer through pipelines and water resource management.

Today, WASMO has adopted the principle of the conjunctive use of water. Local water sources are supported by the bulk water available from Mahi pipeline for the Ghogha region and the Sardar Sarovar



Canal-based drinking water supply project and other regional water supply schemes for the earthquake-affected villages. Further, the state government has also planned a drinking water grid so that the 14,000 villages in Gujarat that face perennial water scarcity and quality problems are ensured the availability of safe and adequate drinking water throughout the year on a long-term basis. The grid will facilitate the inter-basin bulk water transfer to North Gujarat, Saurashtra and Kutch. It will also augment the supply of regional group water schemes.

In most villages, there are problems of water quality in ground water sources. Such villages have been encouraged to use the local sources for domestic



purposes and livestock, while the Narmada and other piped water sources have been advocated for drinking purposes. Such bifurcation in the use of water can promote sustainability and security.

There is also a strong emphasis on water resource management for long-term sustainability of local water sources. Practices such as the construction of water harvesting structures including rooftop rainwater harvesting systems have reduced runoff and have increased the availability of groundwater. This has been beneficial not only for the communities but also for the livestock which are an integral part of the rural economy.

3. Developing Programme Cycles

The extensive learning and experience in the Ghogha project paved the way for developing systematic action plans and processes for future projects. The ERR Project and Swajaldhara Programmes now have a far more compact implementation schedule for completing the project activities at the village level. The implementation phase extends over 18 months and consists of two programme cycles. The first cycle covers the initial six month period and focuses on community mobilization, the formation of a Pani Samiti and introducing the programme to the village community. An assessment for water and sanitation requirements is also made in the first cycle, according to which a Village Action Plan (VAP) is prepared. In the second cycle, which extends for a year, the project activities are implemented in the



village. A detailed proposal with approximate costs and household contributions are prepared and finalized, after which a bank account is opened in the name of the Pani Samiti for depositing the community contribution. With the commencing of the hardware activities, all the necessary records and accounts are maintained by the Pani Samiti. After the hardware activities and construction work are completed, the village community prepares itself for full O&M responsibility.

4. Willingness to Pay

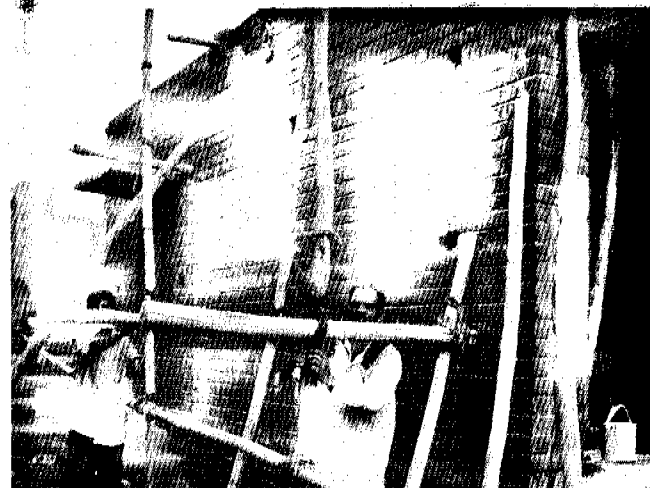
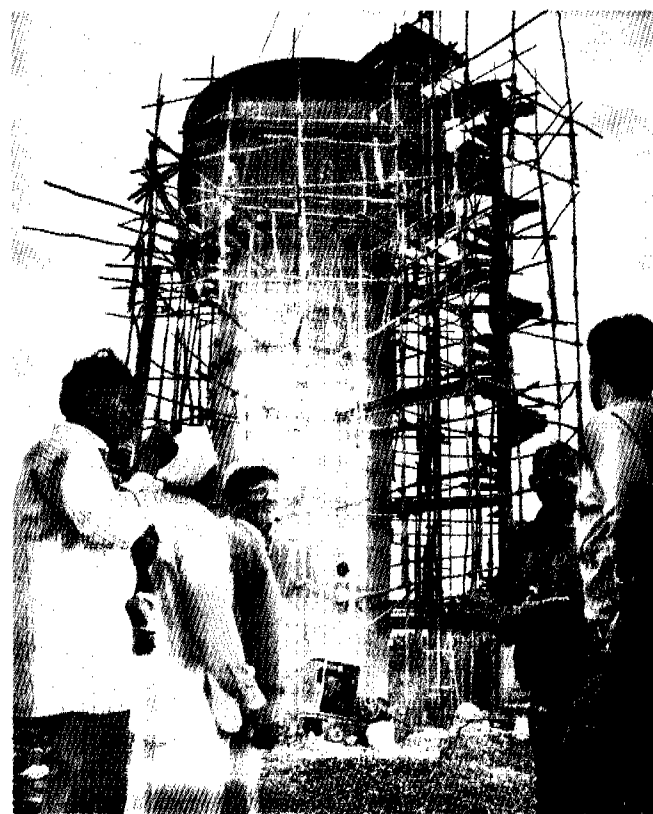
Willingness to pay (WTP) is a strong prerequisite for the financial sustainability of water supply system. A critical examination of the project villages where water and sanitation tariff structures are already in place has shown there are a number of factors which affect the community's willingness to pay. Among these is the strong evidence that WTP directly depends on making available assured, safe and reliable water along with quality of services. In fact, field experiences went contrary to the popular belief that communities will not pay for services that are perceived to be the responsibility of the government.

When the benefits from improved water supply were believed to be important and the members save on time and efforts in water collection, WTP increased. Satisfaction with the level and standards of services also contributed significantly to WTP as communities will pay for those services that correspond with their desire

for comfort and convenience. Regular supply of water not only gives communities, especially women, enough time to attend to their livelihood activities, but also fulfills the daily needs of bathing themselves and their children. The environment in the village with regard to tariffs has a bearing on WTP, and greater cohesion within the community has led to higher WTP. Another aspect which has influenced WTP has been the active participation of women in the Pani Samiti and community meetings. Wherever women have been at the centre stage, even in very poor villages, they are willing to pay at least Rs. 1 per day per family.

5. Sharing Capital Costs

In the Ghogha project, the capital costs were borne entirely by the project for the village water supply works. When the Village Action Plans were prepared, there was token or no community participation. The plans were largely prepared by the engineers. Few options and alternatives were presented for communities to choose from. Unfortunately, no amends could be made in the VAPs during the course of the project, and the villages had to accept the plans.



The fallouts of not preparing need-based VAPs were many. Structures were created that were not necessarily on the priority list of the communities. Where there was a need for a facility, they were not always adequately designed to meet the community's needs. When the communities were then asked to bear the O&M costs, their hesitation and reluctance in some instances could well be understood.

To ensure that projects were participatory since their inception, WASMO, in its other programmes considered a change in strategy. It mandated that communities also share in the capital costs so that they had a greater say in preparing the VAPs. It was decided that the government would shoulder most of the capital costs, and the communities would contribute 10%. The community contribution to capital costs could be made in cash or kind, although a basic minimum sum had to be deposited before the first installment was released into the Pani Samiti account by the project. Unlike the Ghogha project, the O&M collections in other programmes are collected later, once the works near completion.

It has been found in the ERR and Swajaldhara programmes, that sharing in capital costs facilitates sustainability. Since the communities have to pay for the assets, they ensure that only those structures are created for which they have a need. Once the construction is complete, they readily contribute for O&M because they value what has been built.



6. Equity

Equity is an important dimension for community-managed water supply systems. This aspect is being addressed while planning the water supply systems in villages by ensuring that all communities have easy access to water. The people have a choice between stand posts and individual connections, and households having lesser capacity to pay for capital costs usually opt for the former.

For the collection of O&M charges, differential tariffs systems are operational in certain villages to take into account members of lower socio-economic groups. Increased sensitivity to equity issues and the involvement of women has created an appreciation for the need to have lower rates for women-headed households; households headed by infirm or aged members; economically poorer households; and migrant households. In villages where there are a few members who do not have any capacity to pay, they are excluded from the tariff system.

7. Transparency

An important finding under the Ghogha project was that trust and transparency were vital among all stakeholders. They created an enabling environment for communities to manage their new infrastructure. As a result, new projects have systems that ensure that participatory processes are established from the beginning by having communities involved with various financial aspects. The people share in the capital costs, calculate their own

tariff structures and exercise control over project funds. Once water supply and sanitation systems are commissioned to the Pani Samitis, the members are accountable to the communities. Boards displaying all components of the project; list of Pani Samiti members; and physical and financial progress of works are put up at strategic locations in the village. They are a strong instrument for transparency.

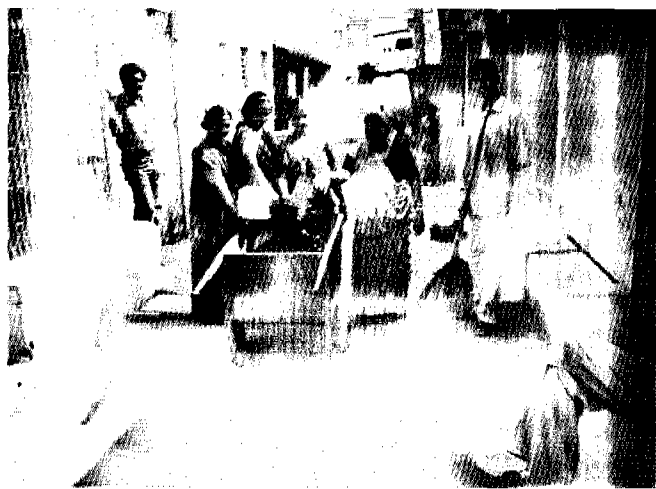
8. Women's Participation

Women play a vital role in drinking water and sanitation sector as they are the providers, users and managers of water and are responsible for household hygiene. Due to their direct involvement in this sector, they value new or improved water supply systems. Hence, their empowerment has helped incorporate their needs and priorities over the different stages of the project. Women's involvement in WASMO projects has had immense impact on the effectiveness of the interventions, and has particularly influenced the garnering of partial capital costs and the full O&M costs from the community.

When there was reluctance among the male members to make the community contributions, it was the women who stepped forward to pay for the assets and own them as well. Their endurance and determination transformed them into adept leaders, able to operate the systems with



ease. Their participation in Pani Samitis brought about greater transparency, and has changed the common perception that local village councils are largely political in nature.



9. Environmental Sanitation

Encouraging environmental cleanliness posed a considerable challenge in the Ghogha project. This made it necessary for other projects to have systems and procedures at the rural level to prevent the contamination of water from domestic sewage and fecal pollution by humans and animals. Several good practices are now emerging that can be easily replicated in the state.

In Kutch, many agricultural and pastoral communities have begun to become aware of the fecal pollution by animals within the village. They have now voluntarily started to leave their livestock behind on their fields at the end of the day, instead of bringing them back to their village. Garbage sites are also being relocated and are kept outside the village. Gutters and soak pits are becoming common within villages, and there are many cases where domestic waste water is harnessed for growing kitchen gardens. Systems for daily garbage collection have also been planned by several villages.

10. Targeting Children

It was in the latter part of the Ghogha project that it was realized that children were an important focus group,

particularly for sanitation. The ERR project has since taken strides in educating school children and teachers about hygiene aspects. Under this project, sanitation corners are being constructed in schools and are being used and maintained by the children.

Meticulous regimentation of hygiene practices at schools has had an impact on women too. There is a high vigil maintained by the teachers to ensure that the children use the toilets during school hours. They also insist that the children come to school clean, only after having a bath. Such practices have pushed the women into adopting improved hygiene behavior in areas where sanitation awareness was low. Often, where communities are more closed and the involvement of women in the villages is limited, targeting children for improved sanitation and hygiene is one of the only major recourse for introducing the community to the concept of sanitation.



WASMO's experience over more than three years has revealed that there have been a large number of benefits to the community-managed approach. There is already considerable evidence for greater equity and better performance of the water supply. Continuing interaction with communities and partners indicates that this approach can indeed achieve the aims it set out with.

About WASMO

- WASMO has been established by the Government of Gujarat as an autonomous organisation to promote, facilitate and empower village panchayats and the rural community to manage local water resources and have their own water supply systems and environmental sanitation facilities.
- It empowers the rural community through Pani Samitis (Village Water and Sanitation Committee) having a minimum of one-third women members to plan, approve, implement, operate and maintain their own water supply systems, manage water resources and ensure safe and reliable drinking water supply throughout the year.
- WASMO works as a facilitator and provides financial and technical support to Pani Samitis/ Gram Panchayats and networks with local NGOs, other State Government institutions, Government of India, donors and UN organisations to fulfill the Gujarat Government's pursuit of strengthening local self-governance through decentralisation and empowerment of the rural community, especially women.
- It partners with people and other voluntary and Government organisations, to promote community based rainwater harvesting by integrating traditional knowledge, wisdom and local innovations in water resource management, water supply and environmental sanitation.
- WASMO encourages adoption of best hygiene practices and habitat improvement by informing and educating communities about issues like greening and cleaning of villages, health, hygiene, safe water, wastewater disposal and the use of toilets and soakpits.

We believe users of water are the best managers of water



**Building partnerships
and working together**



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