Igniting change for 100 percent sanitation
Mobilizing communities to seek their own solutions to rural sanitation

Despite initiatives to increase sanitation coverage in India, about 20 percent of India’s rural population is currently served by sanitation facilities. Given the urgent need to explore alternative effective approaches to take the sanitation agenda forward, Water and Sanitation Program-South Asia (WSP-SA) is examining regional experiences to assist the Government of India and various State Governments to achieve this objective.

An innovative and sustainable model has been piloted in Bangladesh by WaterAid Bangladesh (WAB), an international NGO, in collaboration with Village Education Resource Center (VERC), a local NGO, under a DFID-sponsored project. This model has resulted in 100 percent sanitation in five Sub-Divisions in Bangladesh, and has the potential to be replicated in the region. The basic principle is to ‘ignite’ communities and trigger a change in sanitation practices from open defecation to fixed-point defecation and latrine use by sensitizing people to the lack of environmental sanitation and its impact on health. The community is then motivated to change behavior patterns and seek the introduction of sanitation facilities without external subsidy, which will ultimately lead to improved health and self-esteem.

The approach focuses on motivating people to change existing behaviors and practices and to get on to the sanitation ladder, even if it is on the lowest rung. The success of this model is based on the principle that once new hygienic practices are adopted, people generally do not regress to traditional behaviors but go up the sanitation ladder as superior options become affordable.

The WAB-VERC approach emphasizes community empowerment and institution-building rather than the provision of services and ‘top-down’ solutions. It recognizes that communities have inherent strengths, and can be empowered to actively plan and implement their own sanitation solutions.

Through its partnership with the community, and by using appropriate participatory rural appraisal techniques, VERC was able to build local institutions and ignite change. Once communities became aware of the need for better sanitation, community-based action groups were formed to press for behavior change. Meetings were organized at the village level to find collective
responses and monitor progress. Religious leaders and teachers were encouraged to spread the message of hygiene and create social pressure for change. Field workers also helped to form community-level rural sanitation engineering groups to promote effective and affordable technology options by providing advice and supporting people during latrine selection and demonstration.

To meet the hardware needs of the community, VERC has helped to establish supply chains by setting up construction and sales centers for latrines. As a follow-up to this process and to ensure sustainability, field staff from VERC now collaborate with the community by attending village sanitation committee meetings, identifying and training community-based sanitation activists, and providing technology and supply support during latrine selection and installation.

It is worth noting that total sanitation coverage has been achieved in these Sub-Divisions without any subsidy; in fact, it is firmly believed that subsidies will undermine the sustainability of such schemes.

As countries in the region can benefit from sharing experiences, WSP-SA plans to promote similar partnerships in India. It will play a key role as a technical assistant by promoting the regional exchange of ideas and experiences between local government bodies and NGOs. To facilitate this process, WSP-SA organized a workshop on ‘People’s Initiative for Total Sanitation’ in Bangladesh, in collaboration with WAB and VERC, from February 12-14, 2002. Around 30 representatives from the Government of India, selected State Departments and NGOs participated. Representatives from NGOs working in the Sub-Divisions, local community leaders and community representatives from Bangladesh shared their experiences and ideas.

The workshop included field visits, presentations and participatory group exercises designed to sensitize participants to the process of igniting change. During field visits to pilot villages, participants discussed the process and exchanged views with the community. Participants also debated the strengths and weaknesses of the approach and prepared a strategy for scaling up the initiative in both countries. The opportunity was also used to build partnerships/links with WAB, WaterAid India and VERC to take the process forward in India.

Inspired by a community that is proud of their sanitation facilities and the fact that toilets are considered status symbols, it is hoped that participants will be able to take advantage of the momentum that has been created and build partnerships to pilot similar initiatives in selected districts in India.

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NEWS BRIEFS

STRATEGY PLANNING-CUM-TRAINING WORKSHOP

To take the sector reform process forward, International Water and Sanitation Center, The Netherlands (IRC) organized a strategy planning-cum-training workshop on ‘Planning and Guiding Training of Trainers for Facilitating Capacity-Building Activities and Implementation of Reforms in the Rural Water Supply and Sanitation Sector in India’. The workshop was held in Delft, The Netherlands from January 28 to February 8, 2002.

A national core team constituted by the Government of India, with senior representatives from the Rajiv Gandhi National Drinking Water Mission, Central and State Government Departments, NGOs, associated professional institutions and external support agencies participated.

NEW SECRETARY, MINISTRY OF RURAL DEVELOPMENT

Mr. A.K. Goswami took over as Secretary, Department of Drinking Water Supply, Ministry of Rural Development in February 2002. An IAS officer from the Himachal Pradesh cadre, Mr. Goswami has been Director-General of the National Productivity Council and Chief Secretary, Himachal Pradesh.

As a result of a major policy shift, it has now been decided that the Rajiv Gandhi National Drinking Water Mission will manage both the Total Sanitation Campaign and Sector Reform Projects for rural water supply. As many of the activities of both schemes are complementary, such as IEC campaigns, human resource development and community mobilization, this convergence will be beneficial to the Water Supply and Sanitation sector.

Two articles in this issue of Jalvaani explore innovative sanitation initiatives. The lead story is on a successful model in Bangladesh, which is based on igniting behavior change in communities and strengthening local institutions through partnerships. Piloted by WaterAid, Bangladesh, in collaboration with VERC, a local NGO, this model has resulted in 100 percent sanitation in five Sub-Divisions. The Total Sanitation Campaign promotes similar partnerships in India between State Governments, NGOs and local institutions for which a Strategic Alliance between the Mission and WSP-SA will be useful. A workshop and field visits to sanitized villages were organized in Bangladesh in February 2002 to facilitate the sharing of experiences between stakeholders in India and Bangladesh.

Tamil Nadu and Andhra Pradesh have launched integrated sanitation schemes with a view to meeting the needs of users, particularly women. These schemes are demand-driven and could result in more effective sanitation practices being adopted by the communities. Despite the implementation of water supply schemes, water continues to be a limited resource and it is necessary to monitor excess consumption and regulate supply. In Olavanna, a Gram Panchayat in Kerala, household meters were successfully introduced as a collective response to the problem. Metering water consumption through the use of water meters has led to water conservation in Olavanna and could provide a sustainable solution to uncertain water supply in other communities as well.

Multi-village schemes are becoming increasingly common in India. These schemes have the potential to benefit from economies of scale and provide higher levels of service. However, they also require high levels of investment, technical know-how and cooperation between diverse groups. Ensuring that multi-village schemes are truly responsive to consumer demands is a challenge the water sector will need to take up.

Repairing handpumps has traditionally been regarded as a male preserve that few women have challenged. In an interview with Jalvaani, Ms. Madhavi Kuckreja, Founder and Coordinator of Vanangana, an NGO in Chitrakoot, Uttar Pradesh, shares her experiences of training women in the community as handpump mechanics. Acquiring an alternative skill has made women more aware, independent and empowered, and they now play an active role in the community.

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Joint Secretary & Mission Director
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Integrated sanitation solutions under one roof
Addressing the community’s sanitation needs in Tamil Nadu and Andhra Pradesh

Experience has shown that the success of any rural sanitation scheme depends on meeting the needs of beneficiaries, particularly women. There are no “top-down” solutions, and providing sanitation facilities or building toilets will not result in communities making the necessary behavior change. Moreover, unless communities participate actively, sanitation schemes cannot be sustainable.

Although several sanitation projects have been launched across the country, structures have fallen into disuse for a number of reasons, such as uncertain water supply, lack of appropriate facilities for bathing and inadequate community involvement. A number of schemes do not recognize women’s need for privacy, and safe and conveniently located facilities, which has led to unhygienic and unhealthy sanitation practices. To meet the needs of users, particularly women, Andhra Pradesh and Tamil Nadu have launched integrated sanitation schemes. While the Andhra Pradesh scheme is household-based, the Tamil Nadu scheme is community-oriented. Both schemes are demand-driven and may make the goal of achieving proper sanitation coverage in rural areas a reality.

Tamil Nadu: Women’s Integrated Sanitary Complexes

Recognizing that women are the major stakeholders in the water and sanitation sector, the Tamil Nadu Government launched the Women’s Integrated Sanitary Complex scheme in 2001 to provide toilets, and facilities for bathing and washing exclusively for women under one roof. It is planned that all the 12,619 villages in Tamil Nadu will be covered under this novel scheme over the next two years.

Initially, integrated complexes are being constructed in one selected panchayat in every panchayat union on panchayat land.

A SCHEMATIC PLAN OF AN INTEGRATED SANITARY COMPLEX IN TAMIL NADU
or land gifted by the community. To ensure that the facilities are easily accessible, these complexes are located near habitation sites.

Each block is spread over approximately 750 sq. ft., with 14 latrines and two cubicles for bathing. Stone-paved facilities are also provided where women can wash clothes. Each block has an independent water connection to ensure that users have a steady and continuous supply of water. A pump room and a water tank are also part of the complex. The State Government supports the cost of construction, which is approximately Rs. 2 lakh per complex. Work is executed through tenders. So far 500 complexes have been built and 3,500 are under construction.

To ensure women’s privacy, the Women’s Integrated Sanitary Complex is designed as an enclosed facility where women can bathe and use the toilet facilities without being disturbed. This will result in a long-term positive impact on women’s health.

Village-based self-help groups generate awareness in the community on the need for hygiene and sanitation. These groups also motivate users to adopt more hygienic practices and create a demand for sanitation facilities within the village. The operation and maintenance of the complex, including repairs, is the responsibility of the local government and self-help groups. Beneficiaries determine how much users should be charged, and whether the fee should be paid per visit or monthly.

Community-based groups are responsible for the day-to-day maintenance of these complexes. Beneficiaries can choose whether to maintain the facility themselves or to hire out services. In one community, five families maintain a single toilet unit in the complex while in another, users pay Rs. 10 per family per month to cover the cost of hiring a daily cleaner.

The panchayat provides each complex with an electricity connection, the cost of which is borne by the panchayat general fund. The water consumption charges and the cost of maintaining the pumpset are also borne by the panchayat.

ANDHRA PRADESH: USERS NEED MORE THAN TOILETS

Several sanitation projects have been introduced in Andhra Pradesh to improve sanitation coverage in rural areas. Most of these projects follow a standard design – a twin pit pour flush with a concrete superstructure at the household level.

As in the rest of the state, in Chittoor district, too, a number of rural sanitary latrines have been sanctioned and built. To make the scheme user-friendly, a bathing space has been added to the original design.

The community’s involvement in the modified sanitary unit is crucial. In addition to the government subsidy of Rs. 2,000, individuals contribute approximately Rs. 750 to Rs.1,000 per unit. The community is also responsible for constructing the unit. So far, 1,000 composite latrines-cum-bathrooms have been built and are being used in Chittoor district. This scheme is part of the Rural Sanitation Project.

MOVING TOWARDS INCREASED COVERAGE

In its guidelines for the Restructured Centrally Sponsored Rural Sanitation Program, the Government of India allows village sanitary complexes to be set up exclusively for women on a pilot basis. Up to 10 percent of annual funds can be utilized to provide public latrines in selected villages during the plan period where local government institutions or communities or NGOs can construct and maintain village sanitation complexes exclusively for the use of women. Up to 60 percent of the amount can be earmarked from Central funds, 20 percent from State Government funds and 20 percent met by the beneficiaries. New thinking suggests that subsidies should be directed to communities rather than individuals.

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Anil Agarwal
1947-2002

Anil Agarwal, Founder and Chairperson of the Center for Science and Environment, New Delhi, passed away on January 2, 2002. Mr. Agarwal was a staunch advocate of traditional water management systems and the need to ‘make water everybody’s business’. His work in the water sector includes documenting the water traditions of different regions in India, setting up a National Water Harvesters’ Network, and popularizing drought management techniques. He also helped set up a Rainwater Harvesting Advisory Service to assist organizations and individuals implement schemes for rainwater harvesting.
Multi-village water supply schemes in India
A sustainable solution for water supply?

Rural water supply systems that cover more than one village are becoming increasingly common in India. The desire to provide full water supply coverage to rural areas, despite local water scarcity and increasingly contaminated sources, is leading planners to examine even more distant sources. However, treating and piping water from these remote sources is often complex and expensive, and planners have realized that costs can be reduced, and options broadened, if villages band together and share water supply systems.

Multi-village water supply schemes have the potential to capture economies of scale and to provide higher levels of service, and they appear to offer a feasible and long-term solution to the acute water scarcity faced by many regions in India. However, some water sector professionals feel that multi-village schemes are not an appropriate option in rural India, despite these theoretical advantages. They point out that multi-village schemes require significant investment, substantial technical capabilities and involve coordination and cooperation between large and diverse groups. It is argued that, in a context of limited funds and low capacity, multi-village schemes may not be an efficient use of the scarce resources available.

It is believed that the sustainability problems associated with single-village schemes (due to poor operation and maintenance, and financial and environmental factors) are even more acute in multi-village schemes. Of the 25,000 multi-village schemes recorded by the Rajiv Gandhi National Drinking Water Mission, the proportion of schemes working (at any one time) is significantly lower than single-village schemes. However, it is not clear whether the primary reason for this limited success is inherent to multi-village schemes or the same supply-driven approach ascribed to the poor performance of single-village schemes.

Little is known about demand-responsive approaches to implementing multi-village schemes. Theoretically there is scope for enhancing the operational and financial performance of multi-village water supply schemes, notably through the use of improved management models and more demand-responsive approaches to planning, implementation and operation, but many of the difficulties associated with multi-village schemes appear to relate to their fundamental nature (complexity and dispersion), or to structural problems that are resistant to change. In India, the most intractable problem is the unreliable rural power supply. Multi-village schemes do not operate efficiently under erratic power supplies, and there is ample evidence that increasingly intermittent services result. This problem is not unique to multi-village schemes, but the costs of intermittent supply are unusually high in these schemes, and the impact on willingness of users to pay is significant.

In cases where there is no alternative to a multi-village scheme, the key factors for success appear to be the unbundling of management functions, demand-responsive planning and choice of management institutions, and meaningful involvement of users in decision-making bodies.

Although single-village schemes are (and should be) the primary focus of the Government of India’s rural water supply sector reform program, new approaches to the planning, implementation and, most importantly, management of multi-village schemes need to be sought. The Water and Sanitation Program-South Asia is currently conducting a research program that will link into a global study on multi-village schemes to seek more answers to these important questions.

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Water meters in Olavanna
Communities in Kerala recognize the economic value of water

Metering water in urban and rural communities to improve cost recovery and reduce consumption is a hotly debated issue. In the water-scarce panchayat of Olavanna, Kerala, the community decided to solve its water problems by setting up piped water schemes and installing household meters to regulate consumption. These schemes were introduced on the initiative of the Gram Panchayat in 1987 without government assistance, and have resulted in improved water supply throughout the year.

Rather than agitating against the KWA, the people of Olavanna took the lead in setting up private societies and commissioning small piped water schemes. Today, 60 small water supply schemes are operational in Olavanna, of which 26 have been funded entirely by the local community. The community meets the entire cost of operation and maintenance of these schemes. The other 34 schemes have been partially supported by the Gram Panchayat. Beneficiaries have contributed 25 to 50 percent of the capital cost of these schemes and meet 75 percent of the operation and maintenance costs.

Initially the project did not envisage the use of meters. However, on account of the scarcity of water and increasing consumption, the community collectively decided to meter consumption and discourage excess usage, with a penal provision for excess usage. This is a simplified version of an increasing block tariff, which is a common design in a number of urban systems across the world.

Of the 26 schemes under full capital cost sharing, 22 have installed water meters. The other four schemes are relatively small and community vigilance acts as a regulator for excess consumption. In the Gram Panchayat-supported schemes, lessons from the earlier introduced community-funded schemes prompted the installation of meters at the design stage itself. The cost of meters in both schemes is borne by the individual households.

Each household can draw a monthly quota of 400-500 liters of water, for which a fixed user fee is collected every month. The quota varies across schemes and seasons, going down to about 300 liters during the dry season. Consumption over the permitted limit attracts a ‘penalty’ of Rs. 20 per 1,000 liters. Poorer families who have not paid the capital costs for household connections draw water from street taps, and pay between Rs. 10 to Rs. 15 a month as operation and maintenance costs. On special occasions such as marriages, the demand for additional water is met by charging a fixed user fee of Rs. 250 to cover operating costs such as pumping water. Additional water supply to a household for death ceremonies, however, is not charged.

Members of the beneficiary committee are responsible for meter-reading. Excess consumption is billed along with the monthly charge from the household. The committee member’s visit to note the meter-reading also serves as a reminder for paying the monthly dues.

Although the introduction of meters is an additional expense, currently costing Rs. 400 to Rs. 600 in addition to the cost of the water connection, most community members see an advantage in water monitoring. The Olavanna experience shows that the introduction of meters, coupled with the provision of user charges, has contributed significantly towards the regulation of consumption, and discipline in use. Cost recovery through user charges improves the system’s sustainability. However, as the schemes do not envisage any measures for ground water recharge, inadequacy of sources is now a serious issue which the community would need to address.

Olavanna’s experience is indeed remarkable for not only can societies collect the entire cost of operation and maintenance, but can also impose high charges for high levels of consumption. This is in contrast to the experience of water boards where meters are tampered, the operation and maintenance costs are not paid, and it is impossible to regulate and restrict the use of water at critical times.

Details of the Olavanna initiative are available in a field note.

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Vanangana has been a success story in terms of effectively organizing and training women handpump mechanics. How did your organization choose to focus on water supply in the community?

Initially our work focused on providing women in Chitrakoot with literacy skills. We began to look at issues of water when the women themselves talked of water scarcity being their biggest problem.

Women began to look for their own solutions to the water crisis. Some women suggested that they could repair the pumps themselves if they were trained as mechanics. We responded to women’s voices, and asked government institutions, such as Jal Nigam, to train women from the community to repair handpumps. This initiative proved so successful that Vanangana has now taken on the training program for women mechanics. About 40 women have been trained so far.

What are the main features of your training program?

The training program is designed for women without literacy skills. The initial three-day theoretical training is followed by seven days in the field where practical hands-on sessions include repairing handpumps to reinforce theory. The mechanics of the handpump are simplified and teaching is interactive. Participatory techniques and creative methods are used. Technical details on the depth and location of borewells, costing and information on relevant government schemes are also provided.

What has been the result of this training?

With local mechanics available, repairs are carried out without delay. Women mechanics are considered to be technically on par with their counterparts in government institutions, and are being invited to train men and women in other states. Women mechanics were contracted by Jal Nigam to repair handpumps, which provided direct economic benefit. Women are now also working as independent entrepreneurs.

Are women’s groups effective in the rural water supply sector?

We challenged gender stereotypes by training women as handpump mechanics and organizing all-women watsan committees. We realized that it was important to ensure that women and men were not present on the same committee if women’s voices were to be heard. Since women now have the skills that are crucial for decision-making and purchasing, they have begun to play an effective role in watsan committees.

Do you feel that training women as mechanics has changed their lives?

Apart from economic benefits, training women has resulted in enhanced self-esteem, improved status and increased mobility. Women’s skills as mechanics are in demand by all castes and classes in the community, and they are valued as trainers as well. Women are now sensitized to a number of issues, and they have taken the lead in a range of matters, such as violence against women and accessing and implementing government schemes.

As a result of the training, some women have learned to read and write to keep an account of tools and spare parts.