

Women Hand Pump Caretakers: Mechanics for Sustainable Community Water Supplies

1. Community Water Supply Depends on Equipment

By 2001 Bihar had achieved almost complete coverage of rural households at one source of water (hand pump or tube well) per 250 people. However, according to a Department survey in 2003/4, within two to three years almost 42% of settlements had slipped back to “not covered” or “partially covered” status, affected by a complex mix of problems that included chemical pollution of supply (arsenic, iron or fluoride), water table depletion and bacteriological contamination, but largely because of non-functioning equipment. The direct link between equipment maintenance and sustainability of water supply is increasingly recognised among policy makers.

2. Involving Women in Repair and Maintenance

Under the DFID supported SWASTH programme, BTAST piloted a community managed hand pump maintenance system in two blocks (Dobhi in Gaya district; Shivsagar in Rohtas district), partnering with Jeevika and Women Development Corporation through Mahila Samkhya, with technical and capacity building support from Action for Community Empowerment (ACE). The aim was to develop a replicable model for involving women self-help groups in hand pump operation and maintenance. To date 650 Self-Help Group Federation members have been trained as hand pump caretakers and 60 as mechanics, receiving tool kits containing all the required equipment for basic maintenance and simple repairs. Existing male mechanics also received refresher training.

In each block a comprehensive inventory of the location, type and functional state of hand pumps was prepared (total 3,860 pumps) and a call centre established where the inventory and a list of trained hand pump caretakers and mechanics are kept. The call centres set service charges, receive requests for services by telephone and SMS and inform nearby women mechanics. Rural sanitary marts have been established in conjunction with the call centres, selling spare parts for hand pumps and other items for water and sanitation services and household hygiene needs. Federation members received training in book keeping and recording to enable them to manage these units as social enterprises. Self-help group focus discussions and community meetings were organised to orientate local people about the importance of equipment maintenance and new arrangements for services and purchase of goods. Information was also distributed through leaflets and wall writing.

3. Benefits to Women and Their Communities

The women mechanics have repaired more than 200 non-functioning hand pumps and carried out maintenance work on a further 300. Spare parts and personal hygiene materials worth more than Rs. 20,000/- have been sold from the rural sanitary marts.

Communities know that requests for repair of hand pumps, even in remote areas, will be dealt with promptly and efficiently, which has greatly enhanced the reputation of the women mechanics. An important additional benefit is the increased income opportunities for the women.



4. Women Prove Their Capacity and Earn the Respect of Communities

The programme has been successful because all aspects were addressed cohesively:

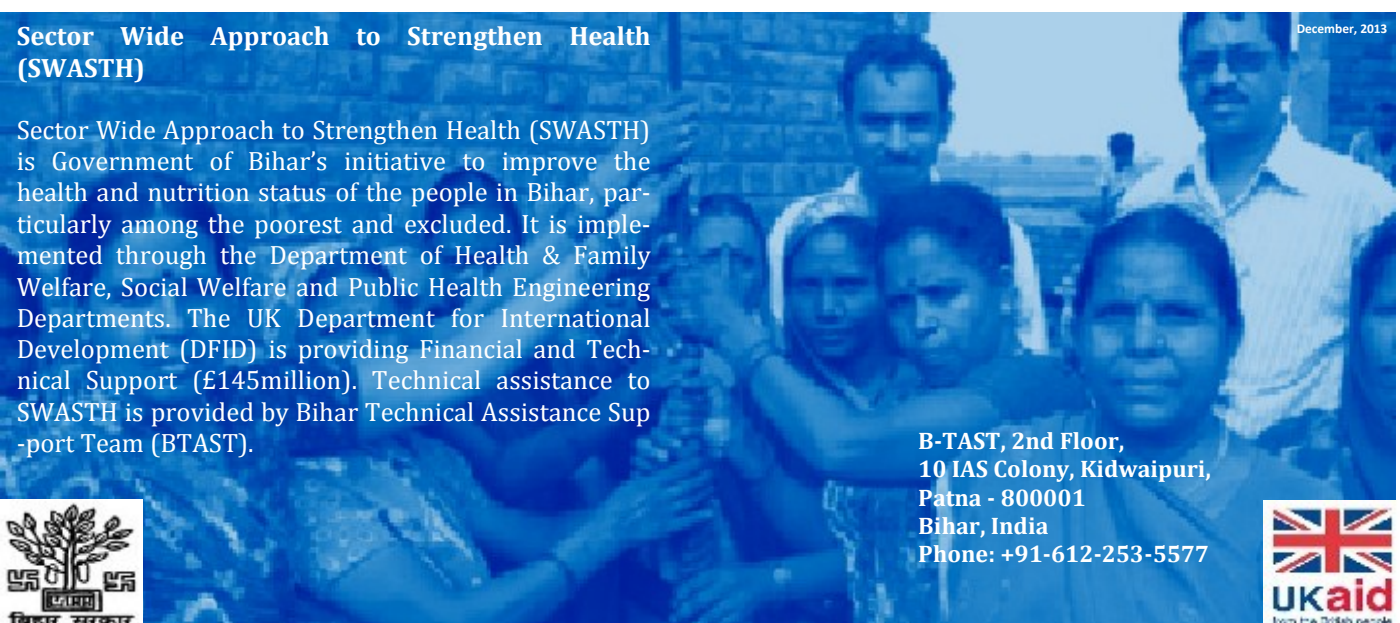
- Skills development through technical, practice based training
- Confidence building through “hand holding” support
- Rapid response through call centres that have comprehensive information
- Access to materials through the rural sanitary mart
- Empowerment of Federation members to run the social enterprise through training
- Demand generation through community information dissemination meetings.

The combination of a locally based, responsive system that meets the basic needs for water supply with the opportunity for women to generate additional income is a powerful one, making this programme particularly attractive. Community ownership and empowerment of women self-help groups are also important factors. In order to capture and build on learning, best practices are being documented and video recorded for sharing with self-help groups and implementing agencies.

However, there is a need to take water quality into consideration as well as the servicing of hand pumps. Mechanics could be taught to carry out a simple sanitary survey of the hand pump environment and expert help should be on hand to help with solution of more complex chemical contamination and water table problems. Water storage and handling in the home should also be covered, since this is where clean water often becomes contaminated.

5. The Way Forward

- To acknowledge the success of the women mechanics, boost their morale and sustain the initiative, it is recommended that an annual maintenance contract be awarded to the Women Self-Help Group Federation by the Public Health Engineering Department (PHED).
- Extension of support for a further year in the pilot areas is suggested to fully embed the capacity and confidence of the women mechanics and Federation members and build further support among communities. During this period an exit strategy will be developed.
- Based on the success observed the initiative should be scaled up in more blocks and districts to assess its workability in different contexts and to capture any further learning.
- A strategy will be developed for scaling up country wide under PHED, identifying ways of working in areas where there are no Federations or where there are different systems in place. Since Mahila Samkhya is present across the State they will be an important partner. Local NGOs and community based organisations could be involved if they have the support and capacity.
- A survey should be carried out to assess the coverage of household water supply before and after the project and see if a real increase in percentage coverage has been achieved.



Sector Wide Approach to Strengthen Health (SWASTH)

Sector Wide Approach to Strengthen Health (SWASTH) is Government of Bihar's initiative to improve the health and nutrition status of the people in Bihar, particularly among the poorest and excluded. It is implemented through the Department of Health & Family Welfare, Social Welfare and Public Health Engineering Departments. The UK Department for International Development (DFID) is providing Financial and Technical Support (£145million). Technical assistance to SWASTH is provided by Bihar Technical Assistance Support Team (BTAST).

December, 2013

B-TAST, 2nd Floor,
10 IAS Colony, Kidwaipuri,
Patna - 800001
Bihar, India
Phone: +91-612-253-5577

