In a short span of four years, there has been a four-fold increase in the number of private outlets selling spare parts of Tara handpumps in Bangladesh. The Government reacted positively to this change and phased out free distribution of Tara spare parts. Thanks to the Handpump Training and Monitoring Project (HTMP), Tara handpump’s acceptability, as an alternative to the traditional No.6 suction mode pumps, has improved since the project went on stream in 1993.

Since the Tara handpump can lift water from as low as 15 metres depth, it has found favour over its predecessor in the low water table areas of Bangladesh since the mid-80's. Located in greater Rajshahi, the project covered 15 sub-districts - an area of over 4,500 square kilometres inhabiting approximately 6.6 million people. The project not only aimed at training and encouraging the private sector to take up spare parts distribution of the direct action, force lift pump but further improved its sustainable operation and maintenance.

Focus

The project focused on:

- Improving the design and production of the Tara handpump through monitoring the performance and maintenance in the project area;
- Developing a sustainable and replicable maintenance system involving users, specially women, along with promotion of hygiene practices; and
- Encouraging and promoting the private sector participation in the distribution of Tara handpump spares.

Components

The project’s three main components were:

Monitoring: To assess performance of the pumps in the project area, user friendly computer MIS software packages were developed. These packages were tested in four districts of the project area. Data was collected regularly in a specified format by DPHE mechanics to generate reports on the pump's performance and to provide information for further improvement of pump design and its components. The MIS also helped gain insight on the social acceptability of the pump.

Training: The modules and materials for Training of Trainers (TOT) and Caretaker Family Training (CTF) were developed through a participatory process. To ensure maximum participation of women, female health educators imparted training alongside male handpump mechanics.

Spare Parts Distribution: Through a Spare Parts Distribution and Management (SPDM) system, the project was instrumental in building linkages among users, private mechanics, retailers, wholesalers and manufacturers. A series of SPDM meetings at the Divisional and District level were organised during the project.
Project at a Glance

Implementing agency: DPHE
Funding agency: DANIDA

Cost
DANIDA Contribution: $859,000
GOB Contribution: $49,450
Details
Total no. of pumps in the area: 11,000
Start date: September 1993
Project end date: December 1997

Training
Completed 4 TOT
Completed 800 CTF
Completed 400 CTF Refresher Training
Conducted 15 Training of private pump mechanics
Developed Training Module for CTF trainers.

Monitoring
Developed 4 software packages for
1. Bi-monthly routine monitoring of 300 Tara pumps
2. Monthly random monitoring of 600 Tara pumps
3. Quarterly random monitoring of all the Tara pumps
4. Monitoring of CTF training

Spare Parts Distribution & Management
Organized 1 meeting at Divisional, 4 at District and 15 at Thana level.

Project period. These meetings were strategically spaced to help increase the number of private sales outlets within the project area. In addition, it also promoted awareness among manufacturers and consumers to the need for quality control of the pump components.

Performance

Strategic monitoring was introduced to strengthen the project's capacity to learn lessons from monitoring. It helped in identifying areas that required reorientation to meet expectations and realities. Close interaction between RWSG-SA and DPHE with support and periodic review by DANIDA, made it possible to monitor and strengthen project's performance.

Impact

The project helped the DPHE phase out free distribution of Tara spares. In addition, DPHE engaged the services of spare parts manufacturers, wholesalers, retailers and private mechanics to prepare a suitable marketing strategy. Twenty SPDM meetings were facilitated by the project. Realising the significance of the participatory process, DPHE agreed to include two new caretakers per pump. Furthermore, it utilised independent monitors and female health educators to review the CTF training, and engaged its 30 best tubewell mechanics out of the 75 working for the project, for CTF training.

DPHE's response had direct bearing on the training imparted by the project. For instance, the training component reduced average installation time of pump from 101 days in 1995 to 86 days by the time the project came to a close. Training further helped improve the level of intervention of caretakers, from 30 to 72 during the same period.

Constraints

Major constraints observed while implementing the project were:

- The project had to operate in a traditional top down and centralized environment with little initial appreciation of users' participation and sharing of resources.
- There was insufficient capacity of the implementing agency both at the Divisional as well as District levels to fulfill their commitments as per Project Document.

Conclusion

Despite the constraints, the monitoring packages developed and employed by the project enhanced the capacity of DPHE to improve the efficiency of the pump as it could identify those twelve fast wearing spares which needed quick replacement. This helped improve planning for future expansion of rural water supply program based on Tara handpumps in low water table areas. Training, on the other hand, increased the capacity of user groups in the operation and maintenance of Tara handpumps and thereby enhanced sustainability.

The dissemination of private sector marketing information created an enabling environment for private sector to market handpumps and spares in the project area and beyond. A survey indicates the increase in the number of private spares outlets from 24 to 99 during the project period. The project also influenced the Government to reduce support from operation and maintenance, by phasing out free distribution of spare parts.

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