LESSONS LEARNED

Improved Rural Community Water in Andhra Pradesh

In May 2007, the Global Partnership on Output-Based Aid (GPOBA) launched an output-based aid (OBA) scheme to improve the quality of and access to safe water in coastal areas of Andhra Pradesh, India. The project set out to deliver 25 water purification plants, improving access to clean water for 75,000 people.

DEVELOPMENT CHALLENGE

For years, in the rural coastal areas of Andhra Pradesh, there were no alternatives to the highly contaminated tap water from piped water systems. According to the World Development Indicators Database (2006):

- Although 86% of India’s population had access to improved water sources for rural households, that figure was only 18% in Andhra Pradesh.
- Despite improvements in water supply coverage, over 22% of Andhra Pradesh’s total population had experienced bacteriological contamination of water at the time of project appraisal.
- Most of the villages in coastal areas were dependent on irrigation canals/ponds for drinking water, treated through slow sand filters and distributed through individual household taps and public taps.
- Due to the poor operation and maintenance (O&M) of the slow sand filters and the distribution network, the quality of water available to rural households was extremely poor.

OBA APPROACH

The project’s objective was to provide safe drinking water to 75,000 inhabitants (earning less than US$20 per month) in selected villages. The anticipated outcomes at the household level (i.e. health, economic and social) were consistent with the project scope, duration, resources and approach, and could reasonably be achieved.

The likelihood of success was enhanced by promoting awareness on safe drinking water use, in addition to providing the actual safe water source.

The project design and implementation arrangements were structured around core OBA principles—i.e. explicit targeting of the poor, accountability for results, shift of performance risk to the service provider, innovation and efficiency, and sustainability—and aligned to the twin objectives of improving access to safe drinking water and creating awareness among rural households on the health risks posed by consumption of unsafe water.

The explicit targeting by income and/or geography ensured that subsidy payments helped those who needed it most—the poor. An independent verification agent (IVA) ensured that funds were paid to the service provider only after the pre-agreed services or outputs had been delivered.

RESULTS ACHIEVED

By December 31, 2010, about 78,000 people had been independently verified as gaining access to safe and clean water as a result of the OBA scheme.

This note captures some of the key lessons learned from the implementation of the OBA scheme.
**Lessons Learned**

1. **Rural households are willing and able to pay for clean drinking water**: This has been a consistent lesson emerging from many Bank-supported rural water supply and sanitation projects in India. In this case, paying a cost recovery tariff was a new concept for the beneficiaries, which for decades have become accustomed to free service delivery from the government. The shift in payment behavior was made possible by community awareness and social marketing campaigns carried out by the implementing agencies, and a high level of transparency and accountability ensured through the OBA approach.

2. **The project built on the positive experiences of “fee-for-service” community based water schemes in the State**: The design reflected the lessons learned and the positive experiences of “fee-for-service” community based water schemes in the State: The project built on the positive experiences of “fee-for-service” community based water schemes in the State:

3. **A win-win strategic partnership between the grant recipient and the technology provider/operator is critical to success**: The role of the Naandi as grant recipient, administering the project and interfacing with the implementing agency and the Panchayat through a tripartite agreement, was instrumental for the success of the project. Naandi provided support in selecting communities and targeting beneficiaries. Throughout the project Naandi visited beneficiary communities, trained and facilitated community-based health promoters, managed awareness campaigns and helped clarify issues relating to project implementation. The partnership resulted in a win-win situation whereby WHIN benefited from increased demand generated by Naandi’s safe-water education campaigns, and Naandi benefited from linking its traditional health education work to new and reliable clean water supplies.

4. **Setting a clear and realistic objective from the outset enhances the chances of project success**: The objective of the project was to provide safe drinking water to 75,000 poor inhabitants in 25 coastal villages of AP. The project delivered results on the ground by providing safe water access through construction and installation of 25 UV water purification plants in 25 villages in Guntur, Krishna and West Godavari districts. By grant closure, all water plants were fully operational and serving a total of 16,104 poor households (or 77,878 people), which is 28 percent higher than the original target of 12,500 households. Household surveys conducted after grant closure found that 98 percent of the households reached by the project still continue to use water from the new plants for drinking purposes (i.e. they have not reverted back to existing contaminated sources). This implies a high community awareness of the health risks of contaminated water, and evidence of the effectiveness of the awareness campaign which complemented the hardware component.

5. **Small grant-financed pilot projects can stimulate discussion on wider sector issues**: This project partially contributed to stimulating a wider sector discussion on issues related to appropriate water treatment technology for rural water supply, institutional arrangements for O&M, and improving accountability and transparency in service delivery. The opportunity still remains to engage with the line State government agencies (such as the Rural Water and Sanitation Department) regarding the potential benefits of the approach in general and the potential for wider application.

6. **Appropriate application of the World Bank’s fiduciary procedures to an output-based arrangement minimized the fiduciary risk without encroaching on the implementers’ freedom to use its own systems to deliver outputs**: The project demonstrated that paying on outputs effectively transfers procurement and fiduciary management-related risks to service providers.

---

**Project Partners**

**GPOBA**

Approved a grant of US$800,000 to subsidize the cost of access to clean and safe water to villages through ultraviolet (UV) water purification plants, and an additional US$50,000 to engage an IVA.

**Naandi Foundation (Naandi)**

Acted as the Project Manager and grant recipient. Naandi was responsible for ensuring the project met its deliverables, undertaking community education and incentivizing the local community to use treated water.

**Village Panchayat**

Provided regular source of water and land for water purification system, and electricity a pre-agreed tariff.

**Water Health International India (WHIN):** Constructed and installed 25 UV filter water purification plants at selected village sites. WHIN was also responsible for operating and maintain the plants, providing long term loans to villages to cover a portion of the cost of construction, and sharing project implementation risks by issuing operational performance guarantees.

---

The case studies are chosen and presented by the authors in agreement with the GPOBA program management team and are not to be attributed to GPOBA’s donors, the World Bank Group, or any other affiliated organization, nor do any of the conclusions represent official policy of the aforementioned organizations.