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# LESSONS LEARNED



## Vietnam Rural Water

### DEVELOPMENT CHALLENGE

Vietnam has performed well in moving towards universal water supply, increasing access to improved drinking water sources from 62% in 1990 to 95% in 2012.<sup>1</sup> In rural areas there are still challenges to increasing access to piped water supply; the access rate is 9% compared with 61% in urban areas. Expanding piped water access is essential if the government is to meet its targets and provide all rural households with access to 60 liters of clean water per person per day, universal access to hygienic latrines and suitably improved personal hygiene.<sup>2</sup> Private operators and communes play a significant role in building and operating most piped water systems in rural areas; however, there are often constraints to financing the expansion of services to poor consumers who cannot afford the cost of access.

### THE PROJECT AND ITS PARTNERS

In 2008, the Global Partnership on Output Based Aid (GPOBA) approved a \$3 million grant to support investments in piped rural water supply systems, in conjunction with the government's efforts to operationalize its national Rural Water Supply and Sanitation Strategy. The project was implemented by the East Meets West Foundation (EMWF), an international NGO that works with local government authorities in Vietnam to develop a community-based approach for safe water supply to rural households. The project originally targeted schemes in five provinces in central Vietnam, which were among the poorest in the country, with extreme poverty rates of between 21 and 29%.

In the Central Provinces, EMWF selected sub-projects proposed by Commune People Committees (CPCs), the local authorities that own the rural water systems. Eligible communes had to be poor, have viable raw water sources, and communities willing to pay partial connection fees and on-going tariffs for water supply. EMWF pre-financed the schemes and handed them over to the CPCs, which either managed the systems

themselves or handed over operations to cooperatives, water managers or water users associations. EMWF guaranteed the water system for one year and trained the operators.

<sup>1</sup> WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation. *Estimates of the use of water sources and sanitation facilities: Vietnam*. Updated April 2014.

<sup>2</sup> As stipulated in the National Rural Water Supply and Sanitation Strategy to 2020 (RWSS 2020).

### RESULTS ACHIEVED

- The project provided access to affordable, clean water supply to 35,065 households; 32,875 were operating in a satisfactory manner after six months of operation. The project reached approximately 180,000 beneficiaries.
- In the Central Provinces, EMWF constructed 41 water systems in poor rural villages, serving approximately 115,000 people. The beneficiaries paid about \$300,000 in connection charges and contributed free labor by digging trenches. Local communes provided land valued at \$50,000.
- In the Mekong Delta, private contractors constructed 41 systems, serving approximately 65,000 people. The operators raised almost \$1.4 million of capital to pre-finance the schemes and invested \$550,000 to be recuperated from tariffs; users paid around \$250,000 in connection fees.
- The subsidies lowered connection fees from between \$47–\$117 per household to \$14–\$38 per household, and contributed towards the cost of upstream system improvement and extension. After six months of operation, 72 of the 82 schemes were found to be satisfactorily operating and supplying water to 93% of the targeted households.
- Based on the successes and lessons learned from this OBA pilot, efforts to scale up the work are underway with support from the Australian government and the Bill and Melinda Gates Foundation.



## Lessons Learned

### 1 Schemes managed by private operators are operating more efficiently than those run by communes.

An independent long-term sustainability assessment was carried out on the sub-projects, which assessed them on the basis of: project design, implementation and operational performance; record keeping and adequacy of budgeting; revenue collection and financial performance; and customer utilization and satisfaction. In the Mekong Delta, where schemes were implemented by private operators, 85% were operating in a satisfactory manner and at low risk of decline. In the Central Provinces, where schemes were implemented by communes, 58% were operating satisfactorily. A survey carried out by EMWF also noted that sub-projects run by private operators have better cost coverage, higher collection rates and better debt management, and lower rates of water loss. Customer surveys also suggest the regularity of water supply and the length of time taken to repair breakdowns were considerably better in privately run schemes. Tariffs ranged from \$0.14 to \$0.24 per cubic meter, and were generally higher in the Mekong Delta where the schemes were run by private operators. Further analysis is required to understand the extent to which improved performance can be attributed to private scheme management and / or tariff adequacy.

### 2 Supporting a variety of management models and adapting the subsidy to suit market pricing and consumer affordability was crucial in increasing uptake by the targeted households.

In 2009, a review was undertaken to assess project costs and bring private companies into the project. In the Central Provinces, subsidy levels were revised upwards from \$100 per connection to \$140 for schemes managed by communes and cooperatives to address cost escalations that became apparent during implementation. In the Mekong Delta, the project introduced support for schemes implemented by private operators, in which a subsidy of \$80 to \$120 supported investment costs of \$175 to \$225 per household. The flexibility of the subsidy levels to suit the realities of market pricing and consumer affordability was critical in increasing uptake by the targeted households.

### 3 Mechanisms for identifying viable schemes and capable operators should be developed from the sample of pilot projects to identify success factors for the long-term financial sustainability of small piped water systems.

In order to assess the financial viability of schemes that could

benefit from the subsidy, there was considerable technical support for scheme design, implementation and operation, provided by both local governments and EMWF. The Department of Agriculture and Rural Development played a key role in identifying potential public schemes and in vetting private operators. There were nevertheless gaps in vetting criteria that led to some unviable schemes being included in the project. For example, in the Central Provinces, many households continued to use hand-dug wells to meet some of their water needs, which affected the financial viability of those schemes. In the Mekong Delta, some private operators that were selected to implement projects did not have sufficient financial capacity to carry out the works. Limited access to commercial financing to roll out the investments also slowed progress with private sector operators. However, the pilot has established a valuable sample of projects from which success factors can be gleaned and applied to future business models to support the long-term financial sustainability of small piped water systems, and to improve on mechanisms for identifying new projects to be financed through an OBA subsidy approach.

### 4 A vibrant private sector and supportive enabling environment contributed to success in the Mekong Delta. To further scale up access to water through private operators, an output-based subsidy mechanism should be housed within the government.

The OBA approach created incentives for private operators to invest in the expansion of small-scale infrastructure, and transferred implementation and demand risk to the private sector by paying subsidies against verified outputs. This was possible because of a vibrant private sector and an enabling policy environment established by some of the provinces in the Mekong Delta. In most other parts of the country, private sector participation in rural water supply will require significant policy and regulatory reforms. In order to scale up access through privately run piped water systems, a formal mechanism for providing targeted subsidies should be structured within government systems. These subsidies could support private operators to access credit to build out schemes while keeping tariffs affordable for poor consumers. Consideration would need to be given to regulating supply standards and tariffs and to setting up an effective monitoring and evaluation system. Such systems could ensure that capital subsidies support financially viable projects that target the poor, and are paid in an output-based manner to improve the efficiency of public funding.

\*All monetary amounts are in US\$ unless stated otherwise.