

# GRID LINES

Sharing knowledge, experiences, and innovations in public-private partnerships in infrastructure

## Meeting water needs in Vietnam

### How engaging communities can help lead to viable projects

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**B**ringing in the private sector to provide water has often been a contentious idea, largely because of a perception that people consider water supply to be their natural right and something to be provided by government. In Vietnam the issue is further complicated: given the history of a strongly centralized economy, would the private sector be willing or able to respond to new opportunities in water infrastructure? Pilot projects testing a new approach in two Vietnamese towns provide encouragement: Allowing communities a voice in determining how water will be delivered and at what cost can lead to viable and politically acceptable solutions. And the local private sector is responding to the new opportunities.

Vietnam's remarkable, sustained growth in recent years has enabled the country to lift some 20 million people out of poverty in less than a decade. Still, Vietnam is far from a rich country, and the well-being—and therefore productivity—of its people fall short of their potential. Although about 75 percent of the population still lives in rural areas, rapid urbanization is putting a strain on the country, especially its ability to finance growing infrastructure needs. Among the country's 627 district towns (with populations ranging from 4,000 to 50,000), more than 400 still lack any form of piped water supply.

Faced with the urgent need in unserved communities like these, how can Vietnam best expand access to water supply

service? Provincial water companies, nominally responsible for serving district towns, have only limited resources and tend to focus them on major provincial cities. So the government has been seeking alternative approaches to service provision, including involving the private sector. But given the country's history of a strongly centralized economy, there has been a question whether the private sector would be willing or able to respond to new opportunities in infrastructure.

### Testing a new approach

Typical is the situation in Lim Town, lying just 25 kilometers northeast of Hanoi, along National Highway 1A, and in Minh Duc Town, 15 kilometers northeast of Haiphong City, on the Gia River. With no community water supply system in either of these district towns, residents must rely on untreated well or river water. In Minh Duc Town many households buy drinking water from a nearby town, but neither its source nor its quality is controlled.

In 2002 PPIAF provided a technical assistance grant of US\$406,000 to pilot a new way of providing water supply to district towns. Lim Town along with part of Noi Due commune to its east (with a total

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population of around 12,500) was chosen as one of the pilots, and Minh Duc Town along with part of Ngu Lao commune on the south side of the Gia River (11,700) was chosen as the other.

The aim was to test the viability of a new approach to delivering financially sustainable, customer-focused services—a demand-driven approach in which each community would determine the best way to deliver services, one for which its residents would be willing and able to pay. The services required would be bundled into a single contract—a design, build, and lease (or DBL) contract—and each community, along with the local authority and the provincial water company, would take part in designing and implementing the scheme.

While this is a new concept for Vietnam, a demand-based approach has already been used in the Philippines, and the experience there showed that the private sector could meet the water needs of unserved communities through arrangements such as competitively bid DBL contracts. This experience has provided an initial model for engaging with the private sector on the pilot projects in Vietnam, though it had to be modified to fit that country's characteristics. The Philippine model includes these key features:

- The preliminary designs, resulting water rates, and any other obligations were presented to the community and then refined on the basis of facilitated feedback and discussions.
- The local authority and potential customers were required to “sign up” for a level of service and commitment that they selected. Once the local authority and at least 60 percent of the potential customers had done so, the project could proceed.
- The loan to pay for the project was made to the local authority, which would be responsible for servicing it. Funds for servicing the loan would come from the lease fee paid to the authority by the

private operator (amounting to customer rates less the operator's costs).

- The private operator was selected through open, competitive, transparent bidding.
- The local authority had a grace period of 36 months before beginning to repay the loan, allowing time for the operator to construct the system, connect customers, and start collecting revenues.

Under the approach being piloted in Vietnam, the project owner—which the local People's Committee in each case decided would be the provincial water company—would select a contractor through a competitive process. That contractor would carry out the detailed design work on the water supply system, construct the system, and then operate the system for a specified lease period. The contractor would pay a lease fee to the provincial water company as project owner. Once the lease period ended, the provincial water company would take over management of the system.

The support provided through the PPIAF grant included assisting the provincial water companies and local authorities with the unfamiliar tasks involved in preparing such novel projects for bidding, evaluating bids, and awarding the contracts (Box 1). Construction of the water supply project for Lim Town is being financed by a grant from the Swiss Agency for Development and Cooperation (SDC), and that for Minh Duc Town by a grant from Finland's Ministry of Foreign Affairs.

## Engaging the communities

At the heart of the pilot projects were extensive efforts to engage the communities. These efforts clearly paid off: nearly 90 percent of households in the two towns agreed to connect to the new water systems—at water prices twice those in the areas served by the provincial water companies.

The pilot projects used a range of tools to engage the communities and other stake-

**The aim was to test a demand-driven approach allowing communities to determine the best way to deliver services**

**BOX 1****BUILDING PARTNERSHIPS**

The PPIAF support not only helped undertake a pioneering transaction in Vietnam's water sector. Importantly, it also helped mobilize support from other bilateral and multilateral sources. This includes the financial support provided by the Swiss Agency for Development and Cooperation (SDC) and Finland's Ministry of Foreign Affairs for construction of the water supply projects in Lim and Minh Duc Towns. It also includes support from the SDC for several additional capacity building activities:

- Training bidders and provincial water companies in preparing for the bidding of the design, build, and lease (DBL) contracts and in evaluating bids. This included developing a simple spreadsheet to allow bidders to manage relatively complex computations for financial bids.
- Carrying out information, education, and communication activities to promote hygiene.
- Establishing a revolving fund, managed by the Province Women's Union, to make small loans to households for investments in sanitation facilities.
- Conducting a study on the health and poverty impacts of the water supply project in Lim Town.
- Funding the activities aimed at engaging the communities.

The Water and Sanitation Program, an international partnership housed in the World Bank, is documenting and disseminating the lessons learned from the pilot projects.

holders, including socioeconomic surveys and surveys to assess demand, willingness to connect, and willingness to pay. A crucial element in achieving broad buy-in was the commitment by local authorities to the initiatives.

To allow the communities to decide which approach to water supply was best, each was consulted on technical, financial, and cost recovery options, taking into account projected water demand up to 2015. Two technical water supply options were developed for each pilot, reflecting the town's situation and characteristics. These

options primarily addressed the extent of the proposed networks and the associated costs. Once local authorities chose a technical option for each pilot, drawing on the results of initial consultation with the community, the option was taken back to the community for final assessment.

The consultation process also included discussions of two customer-oriented issues. First, the communities had a choice of two household connection options, one requiring that customers pay an up-front connection charge and then lower rates for water, and the other involving no connection charge but higher rates. Both chose the second option. This option also included a minimum consumption charge for each connection equivalent to 5 cubic meters a month, a mechanism to demonstrate potential customers' commitment to using the service once connected and to reduce the commercial risks for the operator.

Second, the communities, understanding that prices would increase over time as a result of inflation, were asked whether they preferred annual but smaller price increases or less frequent (such as every three years) but larger price increases. Both communities opted for annual increases, and this choice was incorporated into the project design.

**Awarding the contracts**

While bidding proceeded separately for each town, the process was the same for both. The contractor was to be selected through competitive bidding, with the bidding based on a combined technical and financial proposal. Potential bidders had to meet prequalification criteria. Those that did so then went onto a list for approval by the provincial or municipal People's Committee. In Lim Town only private contractors were allowed to bid (a requirement under the SDC's funding). In Minh Duc Town any eligible contractor was allowed, including state-owned enterprises.

**Nearly 90 percent of households agreed to connect to the new water systems**



During the 12-year contract period (up to two years for design and construction followed by a 10-year lease period) no adjustments in construction prices will be allowed. But the contract does allow adjustments in water charges over the 10-year lease period to account for general price inflation as well as adjustments in the lease fees to reflect growth in customer demand. The contract design includes a three-year grace period before lease payments become due, and careful attention was paid to ensuring that the contractors would have a cumulatively positive cash flow over the contract period.

Multiple enterprises, both private operators and eligible state-owned companies, participated in the prequalification and bidding rounds. After evaluation of the bids, both contracts were awarded to local private operators in January 2006. These operators, now in the construction phase, are expected to begin delivering water to customers by January 2007.

## Early lessons

The pilot initiatives in Lim and Minh Duc Towns demonstrate the potential of a strongly participatory approach—paying particular attention to poor households—for realizing financially sustainable projects that meet the articulated needs of small towns. And they show that open, transparent, competitive bidding can be used to engage private operators to provide water service to district towns in Vietnam.

The pilots have also produced early lessons with broader import:

- The willingness and ability of the local private sector to participate in the bidding for the contracts confirm the local market's appetite for such opportunities.
- Still, it must be kept in mind that developing and implementing effective approaches to seeking private sector participation takes time. Support is required to build capacity in both the public and the private sectors. The commitment of time and other resources needed to ensure success should not be underestimated.

As construction is completed and long-term operations begin in Lim and Minh Duc Towns in early 2007, the results are likely to provide more guidance on involving the private sector in such communities. But the pilots have already had influence on the scaling-up of opportunities for private sector participation in Vietnam.

Two World Bank-financed projects have applied the demand-responsive design approach for providing services and will seek to contract out system operations: the Urban Water Supply Development Project, which includes a US\$56 million initiative targeting district towns, and the Red River Delta Rural Water Supply and Sanitation Project. The Finnish Small Towns Water Supply and Sanitation Program has also applied these principles.



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- When consulted on what they want and are willing to pay for, consumers are willing to pay prices for water that exceed current charges, especially when service quality will improve.