Output-Based Aid in Morocco (Part 2):
Expanding Water Supply Service in Rural Areas

Xavier Chauvot de Beauchêne

Supporting the delivery of basic services in developing countries

Since the mid-1990s, Morocco has made big strides in developing access to potable water in rural areas. The National Water Supply Company, ONEP, has developed an important network of standpipes in rural communities and over 87 percent of the rural population has access to a source of drinking water. Many households are now asking for domestic connections, but ONEP’s fixed costs make service provision to smaller communities through the development of domestic connections a loss-making business. To serve these populations better, ONEP is piloting Morocco’s first public-private partnership to subcontract water service provision and management in rural areas, using an affermage-type contract. During the first years of the ten-year contract, the private operator will receive performance-based subsidies from ONEP under an output-based aid (OBA) approach. This will allow the operator to break even early enough to develop a profitable business within the existing tariff structure. If successful, this model for rural water supply could be scaled up in other small towns and surrounding rural areas, thus presenting business opportunities for the Moroccan private sector while enhancing access to piped water services for the poor.

Background

In Morocco, local authorities are responsible for water supply and sanitation services. Major cities have delegated water and sanitation services either to the private sector or to financially independent municipal utilities. ONEP is the national utility in charge of potable water production and transmission in bulk to large urban distribution utilities. As small cities and rural areas lack capacity, they increasingly are requesting ONEP’s assistance to manage their water distribution services. As a result, its mandate was broadened over time to include the provision of water supply services—and, more recently, sanitation services—to small towns and rural areas. At the end of 2008, ONEP covered 80 percent of national water needs and provided water to 28 percent of the Moroccan population (5.6 million people in medium-sized cities and 2.8 million people in rural areas). ONEP is a profit-making autonomous public corporation. However, its organizational structure and internal procedures translate into fixed costs that are too high to make service provision in rural areas profitable.

In recent years, ONEP has tested different models of private sector involvement, from established standpipe-managers to more comprehensive performance-based service contracts. Learning from these experiences, ONEP is now ready to take private sector involvement in water service distribution in rural areas one step further.

Public-private partnership

ONEP is piloting the first public-private partnership for extended subcontracting of its water distribution responsibilities. The aim of the pilot is to provide sustainable water supply services and service expansion in rural areas served by ONEP. The new public-private partnership approach will include technical and—for the first time—commercial management. The private sector would be expected to develop technically and financially efficient management of water distribution in rural areas. It would
also be encouraged to develop access to piped water supply services through household connections and to expand the service area to other rural localities, called *douars*. This approach should enable ONEP to significantly reduce its operating and maintenance (O&M) costs for water provision, while maintaining its current staffing level.

For the pilot area, ONEP selected the Sidi Kacem area, located in northwest Morocco. By bundling small towns and surrounding rural areas, the pilot area represents a population of 130,000 inhabitants or 20,300 households, of which about half are poor or vulnerable. ONEP is currently providing services to about 7,800 households at a loss, and thus has no incentive to connect additional families.

### Output-based aid approach

Demand for household connections in the pilot area is high, but is limited by the connection fee, which at US$577 equivalent is too expensive for poor or vulnerable households to pay. This represented a direct risk to the pilot’s financial sustainability and therefore to the interest of the private sector. ONEP decided, therefore, to introduce an output-based aid (OBA) approach that would reduce the connection fee and subsidize household connections made by the private operator. The innovation is that the private operator must prefinance the “outputs” (here “working connections to piped water supply service”) and receives the subsidy only after such outputs have been delivered and verified by ONEP.

ONEP requested support from the World Bank and the Global Partnership on Output-Based Aid (GPOBA) and obtained a technical assistance grant to help design the OBA approach. GPOBA did not have funding available for the pilot, so ONEP decided to finance the approach out of its own funds.

The main idea for ONEP is that the subcontracted private operator that takes on the management of small-scale operations for a ten-year period is able to reduce O&M costs to a level allowing it to break even early enough to develop a profitable business within the existing government-set tariff structure. The private operator will not receive a management fee, but will be remunerated through the revenue collected from customers. It will also receive a subsidy from ONEP, based on the delivery of three pre-identified outputs, each designed to encourage the private operator to develop the critical mass of customers and water sales needed to make its business financially sustainable. As an incentive to perform, the subsidies will be time-bound. The outputs and associated subsidy are presented in table 1.

### Determining the subsidy level

The amount of subsidy, and hence the unit cost per connection, will be determined by a competitive bidding process on the basis of targets clearly set in the bidding documents. The bidder requiring the lowest amount of combined subsidy wins the bid. The allowable subsidy may be capped.

The OBA subsidy for household connection will represent the difference between a set discounted connection fee for the household and the actual cost of connection. ONEP has proposed MAD 2,500 (US$289 equivalent) as a countrywide set discounted connection fee in ONEP-managed rural areas. However, the private operator will decide if it wants to develop similar conditions or new ones that would better serve its interests to promote household con-

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### Table 1. Outputs and performance targets used to design the pilot

<table>
<thead>
<tr>
<th>Contract objective</th>
<th>Output</th>
<th>Measuring unit</th>
<th>Targets</th>
<th>Subsidy available for the first:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimize initial operational deficit</td>
<td>Water sales in the pilot area</td>
<td>Cubic meter sold</td>
<td>3 million m³</td>
<td>3 years of operation</td>
</tr>
<tr>
<td>Expand service area to 14 new <em>douars</em></td>
<td>New <em>douars</em> reached</td>
<td>Linear meter of network expansion</td>
<td>Initial estimates of 40,000 lm</td>
<td>4 years of operation</td>
</tr>
<tr>
<td>Increase the customer base through new household connections</td>
<td>Working household connection to piped water supply</td>
<td>Household connection</td>
<td>8,500 household connections</td>
<td>5 years of operation</td>
</tr>
</tbody>
</table>

Source: ONEP
connections. Surveys carried out in the pilot area have demonstrated that 80 percent of households would be willing to connect at the MAD 2,500 price. Payment for water consumption is affordable, as demonstrated by the 100 percent collection rate experienced by ONEP nationwide.

To be eligible for an OBA subsidy, households need to express interest in a household connection and provide a down payment of MAD 1,000. Households that fail to do so before the completion of service extension works in their area will later be charged the full connection fee. Under ONEP management, poor and vulnerable households that meet the “social connections” criteria (monthly revenues lower than MAD 3,000) may pay the remainder in installments over three years, at a 5 percent interest rate (compared to the usual 18 percent microcredit rate). The subcontracted private operator may decide to propose the same arrangement, although it is not a contractual requirement. Project arrangements are presented in figure 1.

### Expected benefits

Household connections are expected to provide affordable access to a safe and reliable supply of water at home, of suitable quality and quantity. Other benefits include time savings that can be used for income-generating activities for adults and improved education for children; improved hygiene practices, resulting in decreased morbidity and mortality rates, especially among children under 5; reduced medical expenditures; and improved labor productivity. Broader outcomes of the pilot will include the introduction of demand-driven service provision in rural areas, where investments by ONEP to develop access to water through standpipes generate little income, as populations increasingly disregard them. It will also demonstrate and document a possible way to reduce ONEP’s fixed and variable O&M costs which, if replicated, could improve ONEP’s long-term financial sustainability.

### Innovative aspects

This pilot is very innovative and will pave the way for water reform in rural Morocco:

First, the project will bring a new dimension of risk sharing, with the first public-private partnership in water supply distribution in small towns and surrounding rural areas in Morocco. The pilot structure creates the right incentives, by providing targeted support until a critical mass of customers is achieved in order to ensure financial sustainability for the operator. ONEP will retain legal responsibility and the final beneficiaries will remain ONEP’s clients. The private

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**Figure 1. Project arrangements**

![Diagram showing project arrangements between ONEP, Private Operator, and Poor household in service area without domestic connection.](image)
operator will bear technical, financial, and commercial risk. The approach will provide both ONEP and the private operator with the highest incentives to perform: the private operator risks losing the subsidy funds if the outputs are not delivered; ONEP risks having to take over if the private operator does not perform.

Second, the pilot will result in a win-win situation. It will test a possible way to ensure ONEP’s long-term financial sustainability, while encouraging the creation of a new set of local operators who could later bid for full delegation of service and/or manage sanitation.

Third, the pilot could also involve a local commercial bank to handle and channel the subsidy. This could create favorable conditions for ONEP, the private operator, and the bank to develop integrated financial packages for households, through small, short-term loans corresponding to their connection fee. Such an arrangement would allow each party to concentrate on its respective core business and would give the private operator more assurance that it would be paid promptly after the independent verification agent recommends the payment.

Fourth, the pilot presents a window of opportunity for small and medium private sector firms in Morocco to develop new expertise in the water sector. Large, international private operators manage the water service provision in large cities. This rural operation gives smaller firms a chance to enter the water business on a scale they can handle.

Results so far

The pilot is at an advanced stage of procurement and has generated considerable private sector interest.

Because of the innovative nature of the pilot, ONEP organized a first workshop to gather prospective bidders, present the pilot, and answer questions; and a second workshop with the prequalified bidders to explain the bidding documents and the financial model. The World Bank financed consultants to help ONEP organize and moderate each of these workshops, and World Bank staff participated in them. Given the significant private sector interest, ONEP is confident that all shortlisted bidders will submit a qualifying bid.

If successful, this model for rural water supply could be scaled up in other bundles of small towns and surrounding rural areas in Morocco, thus presenting business opportunities for the Moroccan private sector while enhancing access to piped water services in rural areas. This is a pivotal operation that could provide the Moroccan private sector with unique opportunities to enter the market in the rural water sector and potentially in large urban centers.

1 Affermage: type of leasing arrangement under which an operator takes over and runs public infrastructure (here water services) and collects revenue from customers, but does not undertake and finance new investment. Under an affermage, the operator usually shares revenues according to a predetermined formula, stated in the contract. The contract described in this document differs from an affermage in that the responsibility for service provision, delegated by municipalities to ONEP, remains with ONEP and customers remain ONEP customers.

2 In Morocco, the poverty line is at US$1 per capita per day (MAD1,745 per household per month) and the vulnerability line is 150 percent of the poverty line (US$1.50 per capita per day).

3 This amount is to be confirmed and may increase. An analysis is ongoing with support from the World Bank to update the information that led to the proposal of this discounted fee, as it refers to 2005 prices.