Output-Based Aid in Morocco (Part 1):

Extending Water Services to the Poor in Urban Areas Xavier Chauvot de Beauchêne

orocco is a middle-income country with good water infrastructure that provides access to safe drinking water and sanitation to the majority of the urban population. In 2005, Morocco made it a priority to extend service to poor peri-urban settlements, and encouraged operators and local governments to reduce connection fees for their inhabitants. These connection fees had been priced at marginal cost, which represented a major obstacle for poor populations to connect to piped service. The government and the operators of water utilities in Casablanca, Meknès, and Tangiers consequently requested a grant from the Global Partnership on Output-Based Aid (GPOBA) to pilot the introduction of performance-based subsidies to encourage service expansion under an innovative output-based aid (OBA) approach. Initial results show that this approach is helping to refocus service provision on household demand, which has increased accountability, strengthened partnerships between local authorities and operators, and made monitoring of service delivery a priority. The World Bank is now working with the government to plan a scale-up program.

Sector context

By regional standards Morocco already has good water infrastructure assets: 90 percent of accessible resources are stored in 116 large dams; irrigation is developed over 1.4 million hectares; and potable water supply reaches almost all urban dwellers (with individual connections and continuous service for 83 percent of households, one of the best rates in the region). Infrastructure is lagging, however, for water supply in poor urban and peri-urban areas, and for wastewater management (70 percent of urban households are connected to a collection system, but only 5 percent of discharges are treated).

Today, the country faces two challenges: it must adapt water usage to levels compatible with natural resources and improve service access and efficiency while reducing the burden on the state and on poor consumers. Reforms have been initiated to address these challenges, including the National Initiative for Human Development (INDH). Launched by the King of Morocco in May 2005, INDH includes expansion of basic services to the poor, particu-



larly those in urban and peri-urban settlements previously considered illegal, and therefore ineligible for services.

Nature of the service deficit

Currently, about 2 million Moroccans remain without access to water supply and sanitation services in periurban areas of Morocco's main cities. In the Casablanca metropolitan area alone, an estimated 145,000 households (or 900,000 inhabitants) do not receive adequate water supply and sanitation (WS&S) services. These residents get water from contaminated shallow wells, water providers who charge a relatively high unit price, or standpipes which often require women or children to queue for several hours. Access to basic sanitation is even more deficient: a majority of households use cesspits and poorly designed septic tanks, which risk increasing contamination of shallow groundwater. Many of the poorest people remain without any form of sanitation.

These deficiencies directly affect people's health and their ability to engage in income-generating activities—or, for children, to attend school. They also harm the finances of water utilities, which usually attain very low cost recovery from these public standpipes (the municipalities or communes responsible rarely pay the bills).

Several factors have contributed to this situation:

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- Unplanned growth of peri-urban areas has systematically left them out of the service areas of water and sanitation operators.
- Technical and administrative hurdles make it difficult for operators to intervene in illegal settlements, mostly because basic access roads are lacking.
- Operators have difficulty financing infrastructure for households perceived to consume in the lossmaking "social tranche" of existing water tariffs.

Connection fees are charged to the beneficiaries at their marginal costs,² topped with a "first settlement fee," thereby driving costs of access to unaffordable levels for most households living in the city outskirts, even when the option of payment by installments is available through "social connection" programs.³

Mobilization through the INDH

Since 2005, the INDH and the Government's Cities Without Slums program (VSB) have mobilized stakeholders to upgrade poor urban and peri-urban areas. INDH removed a critical obstacle by recognizing informal settlements. VSB promoted their inhabitants' resettlement to either housing units in apartment buildings or serviced plots. It also encompassed "restructuring and upgrading housing on site" through strengthening basic infrastructure. INDH also promotes service coverage expansion through agreements among relevant stakeholders, including specific arrangements for discounted household contributions for connections to water supply and/or sanitation services. These arrangements include a waiver of the "first settlement fee" and of the 10 percent design and supervision fee otherwise charged by the operators. In addition, building on the "social connection program," eligible households are allowed to pay their contribution over time (terms vary by operator). In Meknès, for example, households can pay their contribution of MAD 9,240 for water and sanitation services in 84 monthly payments of MAD 110 (MAD are Moroccan dirhams).

Despite significant progress, INDH/VSB has continued to face challenges, including:

- Lack of financing to develop connections for onsite upgrading in certain areas. For example, in metropolitan Casablanca, the 65,000 households to be resettled will be connected to water and sanitation services. However, no service expansion solution is proposed for the 80,000 households (over 500,000 inhabitants) targeted by the on-site upgrading approach.
- The need for coordination among various stakeholders. INDH/VSB implementation requires good coordination of activities to expand the

network; a lack of it may generate delays in the establishment of household connections.

INDH's Urban OBA pilots

In an effort to facilitate affordable connection to water and sanitation services and to support water utilities in their efforts to improve access in low-income communities, the government and the operators of water utilities in Casablanca, Meknès, and Tangiers requested a grant from GPOBA to pilot the introduction of performance-based subsidies to encourage service expansion under an innovative output-based aid (OBA) approach. Launched in 2007, Morocco's Urban OBA pilots aim to connect 11,300 households to piped water and sanitation service in poor peri-urban neighborhoods of these three cities. The pilots are funded through a US\$7 million grant from GPOBA and are implemented by the incumbent service providers in each city. Amendis in Tangiers and LYDEC in Casablanca are international private concessionaires. The Régie Autonome de Distribution d'Eau et d'Électricité de Meknès (RADEM) is a public utility. The Government of Morocco also plays an oversight and monitoring role.

The project breaks new ground, as it is the first:

- OBA project in Morocco and in the World Bank's Middle East and North Africa region.
- Project involving multiple incumbent operators, piloting the same approach with terms adapted to the specific situation of each city.
- Project involving a public operator. Although initially designed to work with private sector operators, GPOBA has broadened its scope to work with any commercially viable entity.
- World Bank-administered OBA involving connection to piped sanitation, aiming at developing simultaneous connection to maximize efficiency gains and health impacts.
- World Bank-administered OBA project in local currency, to avoid adding a foreign exchange risk to the technical and financial risk taken by the operator.

Figure 1 summarizes the project arrangements. While the details of the schemes vary by operator, they have a common objective: to test an OBA subsidy mechanism, specifically targeted to households in designated predominantly poor peri-urban neighborhoods, with a recognized right to access services through the INDH program.

The built-in incentives of this OBA approach are designed to mitigate traditional impediments of service expansion programs in marginal neighborhoods, such as households' inability to afford connection costs; operators' unsustainable financing for service

expansion programs to poor areas; complex technical and administrative obstacles to infrastructure development in poor unzoned areas; and reticence by national and local governments to fund subsidy programs with no accountability or guarantee for results.

The outputs for which OBA subsidies are disbursed are simultaneous network connections to water supply and sewerage services for individual households. In Meknès, the output is the connection to either service, as RADEM had already expanded networks to some of the pilot areas. All households located in selected areas are eligible for a subsidized connection fee, in addition to the fee waivers granted for INDH areas and payment facilities offered by "social connection" programs. The pre-agreed subsidy is set to bridge the gap between capacity to pay and a competitive cost of connection.

The operators first are required to complete the pipe and connection works. The subsidy, which is operator- and service-specific, is paid in local currency in two steps: 60 percent upon verification by an Independent Technical Reviewer (ITR) of a working water and sewerage connection to an eligible household; and 40 percent upon verification by the ITR of at least six months' sustained service. Table 1 summarizes the unit subsidy amounts per connection.

Lessons learned

Participation is strictly demand-driven. This creates an incentive for the operators to carefully assess demand from targeted beneficiaries during preparation and to

work with local authorities and partners during implementation to raise awareness and promote the program. Operators also developed new means of reaching potential customers by sending dedicated teams to marketplaces or to the heart of targeted neighborhoods to record demand from beneficiaries who might not easily travel to one of the operator's agencies.

The pilots experienced a slow start, with about 2,000 connections (15 percent of the program's three-year objective) in the first year, but connection rates doubled in the second year. An independent midterm review of the pilots showed that the delay was due to implementation difficulties unrelated to the OBA approach: World Bank procurement procedures, upstream investment delays, and lack of clarity over land tenure.

The project midterm review⁴ confirmed important direct benefits⁵ to households and recorded the high satisfaction of beneficiary households with the service provided. There is also evidence of a significant increase in uptake after works started, and collection rates equal or superior to the average in each operator's service area.

Operators and the government are generally satisfied and appreciate the flexibility allowed by the pilot. The OBA approach is seen as helping to improve processes, overcome financing blockages, and mobilize stakeholders. The quarterly inspections by the ITR have also helped to improve the operators' progress reporting requirements and implementation methods. The demand-driven approach is helping to refocus service provision on the households, which has increased accountability, strengthened partnerships

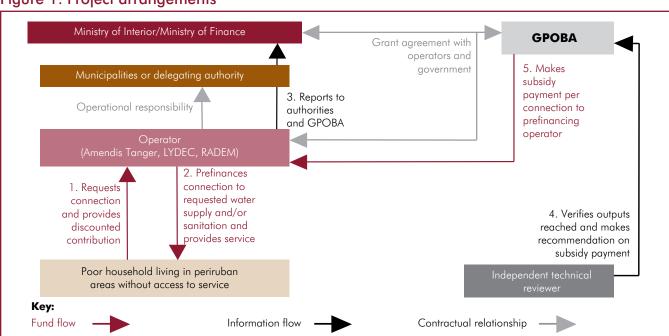


Figure 1. Project arrangements



Table 1. Operator- and service-specific unit subsidy amounts per connection

		Subsidy levels per connection (MAD/US\$ eq.)		Subsidy levels	Minimum house-hold monthly
City	Operator	To water supply	To sanitation	per connection (MAD/US\$ eq.)	installment for connection fee*
Casablanca	LYDEC	MAD 1,458 (US\$170)	MAD 3,609 (US\$421)	28%	MAD 60 (US\$7)
Tangiers	Amendis	MAD 1,467 (US\$171)	MAD 4,158 (US\$485)	24%	MAD 100 (US\$11.7)
Meknès urban areas (Ouislane, Meknès)	RADEM	MAD 1,422 (US\$166)	MAD 7,821 (US\$913)	53%	MAD 110 (US\$12.8)
Meknès rural areas (Dkhissa, Ait Ouallal, etc.)	RADEM	MAD 5,319 (US\$621)	Ineligible to OBA funding	74%	MAD 55 (US\$6.4)

MAD-Moroccan dirhams (U.S. dollar equivalent in parentheses), exchange rate of as March 2009

Source: GPOBA/Infrastructure Développement Consultants

between local authorities and operators, and made monitoring of service delivery a priority.

Next steps

All parties acknowledge that conventional financing would have resulted in fewer connections than OBA in the same circumstances. OBA is seen as strategically relevant to Morocco, given the lack of targeted subsidy mechanisms for poor households, especially in informal urban settings. The Government of Morocco, which is seeking new ways to deliver on INDH's promise, has expressed interest in replicating the OBA approach on a citywide or nationwide scale, adapting it as necessary. As part of GPOBA-supported supervision of the pilots, the World Bank is working with the government to plan a scale-up program that would address the needs of several large municipalities. Such a program would also aim to strengthen coordination between institutions in charge of the different aspects of peri-urban utility service, and reform tariff and connection fee structures, so as to prevent an expansion of unserved peri-urban neighborhoods.

- ¹ Here, the word "peri-urban" includes all settlements located at the cities' outskirts—whether structured in city quarters or hamlets, legal or not—and encompasses hamlets in urban communes presenting characteristics of rural areas.
- In Morocco, connection fees include a portion of the upstream infrastructure necessary to deliver service to that connection, hence driving the cost even higher for people living in peri-urban areas not served by the existing network—who, in general, are the poor.
- ³ Through "social connection" programs, service providers give households the possibility of paying the full connection cost in installments. Households take out a loan for a period varying from 3 to 10 years to access basic services and service providers diversify from their core business to include financial services.
- ⁴ The review is a World Bank requirement. The project design is reviewed and the need to restructure is evaluated in case significant issues arise.
- ⁵ Benefits are essentially time savings, but also reduced health costs and improved hygiene practices. Further study would be necessary to quantify such benefits.

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^{*} For households choosing to pay their connections fees in installments over time.