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The Global Partnership on Output-Based Aid

LESSONS LEARNED

Uganda Grid Based Output-Based Aid Project

DEVELOPMENT CHALLENGE

In Uganda, one of the world's poorest countries and also one with very high population growth, the grid electrification rate is only about 18 percent, and power shortages remain one of the biggest obstacles to economic growth. To address this challenge, the Government of Uganda established the Rural Electrification Agency (REA) in 2001 and formulated a Renewable Energy Policy in 2006. Comprehensive reforms have since focused on making the sector financially viable, creating independent regulation of the electricity industry, and attracting private investment to the sector. The Rural Electrification Fund was also established to help buy down the capital cost of electrification projects while supporting an affordable tariff return on investment. However, while many more power lines were being put in place, actual grid connections were not rising at a corresponding rate – due in large part to poor households being unable to afford initial connection fees.

THE PROJECT AND ITS PARTNERS

In 2012, the Global Partnership on Output-based Aid (GPOBA) approved a grant to make access to grid electricity affordable for poor households in rural, peri-urban, and urban areas of Uganda. The GPOBA contribution of $5.5 million was part of a larger $20.2 million OBA facility funded by the World Bank; the European Union and the Government of Germany through the German Financial Cooperation (KfW); and the Government of Uganda. Out of the total contribution, $17.2 million was applied to connection subsidies and $3 million to technical assistance. The pilot facility was embedded within an ongoing IDA co-financed Energy for Rural Transformation (ERT-2) project aimed at increasing access to modern energy services.

The OBA project, a public-private partnership, targeted poor households who could not connect to the grid because they were unable to afford the costs associated with wiring and connection fees but who could, if connected, afford energy consumption costs. The project subsidized the full cost of connection for (i) poor households near a low-voltage line that could be served with a no-pole service but that had remained unconnected for at least 18 months after an area was electrified; and, (ii) eligible poor households identified in newly electrified areas where poverty mapping had been undertaken. The poverty mapping consultancy financed by KfW was completed in the last years of project implementation.

The OBA facility was implemented by REA, in cooperation with eight licensed service providers. The main service provider was Umeme, a private operator and Uganda's largest electricity distribution company. OBA subsidies were disbursed through REA, which reimbursed the utilities for 100 percent of the total cost of the connection. It was originally planned that the reimbursement would take place in two phases – a portion upon verification of installation of a working conventional meter connection, and the remainder after an agreed period of service delivered and bills paid. As the service providers mainly used pre-paid meters, the project was restructured in 2015 to include one-time subsidy payments for functional connections.

It was initially intended that while most customers would receive a conventional household connection, poorer households (those who could afford monthly

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RESULTS ACHIEVED

This project overcame initial implementation delays arising from a long competitive selection process for the independent verification agents (IVAs), pre-financing constraints of smaller, community-based service providers, and low public awareness of the subsidy scheme to successfully achieve its targets. The strong engagement of Umeme (which completed 85–90 percent of connections) by the World Bank team, together with an IDA-funded consumer mobilization campaign, led to a considerable uptake in connections from 2015 onwards and a strong finish to the project.

Grid connections. The OBA facility supported provision of over 105,000 grid connections for poor households (525,000 residents) in urban, peri-urban, and rural areas, representing about 10 percent of new connections country-wide from 2013–2016. The GPOBA grant, which was fully utilized four months before the closing date of June 2017, supported about 40,000 connections. Service providers reported that the project helped to reduce illegal connections and grow their customer base, which encouraged support within the management of the service providers for the OBA facility and for mainstreaming connection application procedures.

Improved livelihoods and quality of life. With electricity replacing kerosene and candles, residents are enjoying a reduction in indoor air pollution and a reduced risk of fires. Children have sufficient light to study by in the evening, and adults are able to expand the hours of their income-generation activities. Electric appliances are making women's household chores easier, and women are also experiencing improved safety in the community due to better lighting in many areas. Finally, as infrastructure is critical to rebuilding economic structures and communities devastated by conflict, the electrification supported by the OBA facility has contributed to the reconstruction and recovery of areas affected by Uganda's decades-long civil war, helping to facilitate the resettlement of displaced families and the growth and stabilization of communities.

electricity bills but could not afford internal wiring) would receive metered connections, including ready boards. However, due to unforeseen regulatory constraints, the ready boards were not used and the service providers often accepted partial internal wiring (i.e., wiring of 1–2 rooms rather than a whole house) as a basis on which to proceed with metered household connection.

Lessons Learned

1 **It is critical to identify potential implementation barriers, including any related to regulatory frameworks, and create measures to address them at project design stage.** While the OBA facility made connection charges affordable, the cost of internal wiring remained high and was a barrier to access for some poor households. Possible means of addressing this obstacle include partial subsidies for internal wiring (calculated on the basis of a household's willingness to pay) or technical solutions, and the project originally planned to support access for these households through the use of ready boards. However, the absence of institutional and regulatory procedures related to the ready board technology prevented their use.

2 **Small operators could play a bigger role in reaching remote, poor communities if they are supported in building their technical, financial, and scale-up capacities.** Small service providers can play a valuable part in project success, particularly in servicing sparsely populated areas where a large provider may not reach. In this project, however, some small providers lacked pre-financing capacity for connection materials and were sometimes unable to meet demand, as the number of new applications for connections rose considerably because of the project; as a result, the larger service provider, Umeme, accounted for 85–90 percent of total installed connections, and was the main driver behind project progress and the accelerated pace of electrification. Under the IDA-funded ERT-3, small service providers receive connection materials from REA, alleviating the pre-financing concerns.

3 **A public information campaign was critical to project success, but needed to be carefully tailored to the local context.** Effective awareness campaigns, particularly in remote or sparsely populated areas, must be field-based and hands-on (rather than, for example, through television or radio advertisements). Although an initial campaign was slow to reach potential customers, a subsequent IDA-funded mobilization campaign was more effective and acted as a catalyst for significant uptake in connections. The campaign's mobilization consultants worked closely with service providers and households, increasing public awareness of the benefits of electricity and accelerating consumer demand through engagement at churches and mosques and with local council leadership, as well as by going door-to-door. The campaign also supported internal wiring through mobilization of certified wiremen, reduced the involvement of middlemen who charged households high fees for connection and wiring, and contributed to a reduction in illegal connections by making potential customers aware of OBA subsidies for legal connections.

4 **The selection of the IVAs should be carefully planned, so that the competitive bidding process does not result in project implementation delays.** Efficient IVAs are key to achieving progress in result-based projects. The IVAs in this project were procured through a competitive bidding process, which takes time. As OBA subsidy reimbursement is based on the verification of outputs, service providers were reluctant to provide connections until IVAs were on board, and the delay in the IVA procurement resulted in implementation delays. Once the IVAs were in place, connections commenced and/or speeded up, and the IVAs played an important role in documenting critical implementation issues, such as limited customer awareness of the OBA scheme, concerns related to the quality of connections and internal wiring, GPS identification of beneficiary households, and cumbersome connection procedures, issues subsequently addressed by REA and service providers. Proper documentation of the household connections facilitated the verification process.

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