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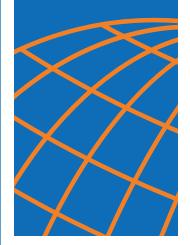
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# Bringing Reliable Electricity to Rural Areas of the Philippines

Electric Cooperatives (ECs) in the Philippines are generally undercapitalized, and their operational performance is poor. As a result, the supply of electricity in rural areas is unstable, with frequent outages and fluctuating voltages. IFC Philippines Advisory Services found that a principal reason was the ECs' lack of sound capital expenditure (capex) plans, and introduced a new product to address the issue. The results from the pilot training of six ECs in post-conflict areas of Mindanao will be replicated in all ECs in the country and ultimately bring an estimated \$274 million worth of investments in capex and power-generation, and reduce greenhouse gas emissions by 600,000 metric tons per year starting in 2015. To get to this point, IFC learned five key lessons about the importance of building strong relationships to "sell" ownership of the program to clients and pivotal stakeholders and ensure program sustainability through local consultants and partner organizations.

Securing a reliable supply of electricity for rural homes and small and medium enterprises (SMEs) is a key ingredient in bringing economic opportunities to the country's least well off. In rural parts of the Philippines, electricity is delivered through a network of 119 ECs that account for 7 million electricity connections, or 75 percent of total connections. The ECs' poor operational performance caused 10 percent productivity losses for SMEs. These inefficiencies contribute to the high cost of electricity, which, at \$14 per kilowatt hour, is one of the most expensive in Asia.

Under its Rural Electrification program, IFC's Advisory Services partnered with the Association of Mindanao Rural Electric Cooperatives (AMRECO), one of the country's biggest groupings of ECs. The Rural Electrification program aimed to strengthen the capacity of AMRECO's 33 member ECs to plan and manage their operations in a financially sustainable manner, particularly through capex investments.

The ECs are now trained to write sound capex plans that include demand forecasting and operational improvements. Capex planning refers to a five-year program that systematically lines up projects to improve the operating

efficiency of the ECs. The capex plan, a key element of the ECs' broader business planning, incorporates a financing and rate impact study. Such plans match demand with supply and distribution and present requests for rate enhancements before regulatory agencies. The realistic rates justify new investments to make ECs improve their operations.

Initially, six ECs participated in six months of training, which resulted in identifying the need for \$26.59 million in new capex investments in five years in these pilot ECs' electricity distribution areas. The capex plans impressed the Energy Regulatory Commission (ERC) and the National Electrification Administration (NEA), which had met with little success in getting ECs to submit realistic capex plans, that they mandated the replication of the program in all the 119 ECs that make up two of every three electricity connections in the country. The ERC promptly approved the six ECs' capex plans, whereupon another group of 16 ECs began similar training, with AMRECO acting as project leader. Thirteen of the ECs are paying the full cost.

On August 5, 2009, the heads of the NEA and ERC signed a memorandum of agreement

with IFC Advisory Services, the Philippine Rural Electric Cooperatives Association (PHILRECA), the National Association of General Managers of Electric Cooperatives, and AMRECO to adopt the "Electric Cooperatives Distribution Utility Planning Manual" based on IFCdeveloped templates for capex plans submitted for ERC's approval and as a vital document in the NEA's supervision of the ECs.

At the request of the NEA and ERC, the IFC Rural Electrification team is scaling up its capex planning workshops to the rest of the country. IFC has agreed to train 30 of 86 rural ECs in Luzon and Visayas, the two other island groups that, together with Mindanao, form the Philippine archipelago. IFC will partner with PHILRECA, the "mother" association of Philippine ECs, and ensure its capability to train the ECs. The ECs are paying the full cost, as they expect the gains to far outweigh the costs. As a result of systems improvement from the training, the ECs' total systems losses alone could be reduced by 2 percent, saving them \$28 million per year.

The following five lessons from the project may help facilitate capacity-building projects in other areas.

#### **Lessons Learned**

#### 1) Find a project leader who can secure client buy-in.

Understanding the problem and coming up with the correct solution are essential to any intervention, but they are not enough. In rural settings, where decision making originates from or revolves around the dominant personality of one person, finding that particular opinion leader is paramount. In AMRECO, for instance, the views of the president carry so much weight in decision making that the Rural Electrification team made sure that he was briefed first and his suggestions heeded before a proposal would be made to the entire board. In PHILRECA, the general manager was the one who had to be convinced first of a proposal's merits.

After a thorough study of why ECs were not delivering stable and lower-priced electricity to rural areas, IFC determined that ECs lacked the expertise, particularly in engineering analysis and system planning, to come up with appropriate capex plans. This, together with the ECs' inability to perform appropriate tariff analysis and their inexperience in justifying proposals for rate increases, prevented them from recovering legitimate costs.

The ECs were ill-positioned to secure long-term financing for their capex needs. Commercial banks have little understanding of ECs, and the ECs could neither package their requests with adequate feasibility support nor describe to the banks the true nature of EC credit risks and strengths.

The key, therefore, was to train the ECs in capex planning and in remedies for other critical deficiencies. IFC, however, took care not to impose the solution on the prospective client ECs. It searched for a competent trainer and found the ideal "relationship builder" in Jed Sevilla, who would later organize and manage the capex planning workshops and guide the ECs, step by step, through the process. Sevilla was previously the general manager of an EC in Sultan Kudarat province in central Mindanao. His technical expertise and relevant experience were known to the clients and earned their confidence. He also had close relationships with the relevant NEA and ERC officials. More critically, he got AMRECO and its member ECs to attend and produce masterful results that won the endorsement of the NEA and ERC. He also prepared AMRECO to become the subsequent trainer of other Mindanao ECs.

#### 2) Give clients a voice in the selection of consultants.

IFC knows the right type of consultants for specific projects, usually more than the clients do, so IFC brings this value as it makes the final choice of consultants. But it is helpful for IFC to shortlist the consultants and get the clients' input confidentially before making the final choice. The clients will then feel they have a bigger stake in the consultants' success and exert more effort to work harmoniously with them.

Contrary to initial beliefs that, if they were given a greater voice in choosing consultants, the ECs would be likely to choose consultants who were more congenial than technically competent, this did not happen. The ECs preferred consultants whose technical capabilities they were familiar with, having met them at the NEA-sponsored competency training for ECs conducted by the University of the Philippines College of Engineering.

In another IFC business line, a foreign consultant was chosen by IFC for his specific expertise, but he and the clients could not work harmoniously with one another, and a replacement had to be found.

#### 3) Choose consultants and partner organizations that know the clients' specific culture and can be more accessible to them over the long term.

The Rural Electrification team's work with the ECs proved that it is critical for consultants to have a good understanding of the cultural makeup and dynamics of clients. People from the West have a rather strict interpretation of time. Filipinos, on the other hand, have a more fluid concept of time. Local managers, particularly those from rural environments, often appear to be prognosticating or even negligent when, in fact, they are operating on a different psychological clock. Knowing this, IFC adjusted project time frames to factor this in. If they wanted the EC trainees to come in at 8 o'clock in the morning, the program had to say it would begin at 7 o'clock, because attendees would habitually come in an hour late, with the senior managers arriving even later. IFC staff from Manila would avoid booking a night flight for the return home; they knew the proceedings would be delayed, and they were better off departing the next morning. Often, the EC manager would say, "I will dig up those papers and sign them tomorrow; what's the hurry?" So the Rural Electrification team would work beforehand with his staff to prepare the papers and present them to the manager at the right moment, and he would sign them. "No problem. Let's go have dinner," the manager would say.

In some ECs, the managers have close kinship or long-standing personal ties with one another. This colors decision making and requires consultants who know how to work in this "family" environment.

Local consultants also provide the advantage of being available to work with the clients for a longer time than the IFC intervention. This helps ensure the sustainability of the program and its benefits.

### 4) Identify pivotal stakeholders and give them a sense of "ownership" of the project.

The two regulatory agencies supervising ECs, the NEA and ERC, were pivotal. For some time, they had been trying with limited success to get the ECs to submit sound five-year comprehensive capex plans. Knowing these past attempts, the Rural Electrification team made sure that both agencies, as well as all previous players who had been helping the ECs, remained on board during the implementation of the project.

IFC presented the two agencies with the project design, objectives, and benefits and gave top officials regular updates, while seeking their suggestions and active participation. When the capex plans were completed, they were presented during an "ERC Engagement Workshop" to the ERC commissioners as well as to the NEA administrator and senior managers. Their inputs were sought and incorporated into the plans, giving the officials "ownership" of the project. This facilitated their approval of the ECs' capex plans and their adoption of the training outputs as the official template for training all 119 ECs.

Another major improvement, which the regulatory officials appreciated, was the fact that the capex plans were made comprehensive to cover five years, unlike the dozens of individual capex decisions that the ECs used to submit year after year for the ERC's approval. Before the IFC-supported templates, each EC submitted individual projects in various styles for every year. The ERC commissioners and technical staff had to pore over the submissions of 119 ECs, and this resulted in all sorts of regulatory delays and disapprovals.

## 5) Synergies with other IFC programs can extend the development impact and sustainability of projects.

The Electric Power Industry Reform Act was passed in 2001 to end government dominance of the industry in favor of the private sector. The law sought to ensure adequate power

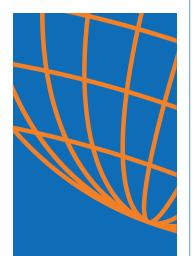
supply so as to bring down the cost of electricity. Incentives were given to independent power producers, but for years there was little private-sector investment in establishing more independent power producers or improving their generation, because the main off-takers for the electricity supply, the ECs, were seen as poor financial risks.

The Rural Electrification team synergized with the Sustainable Energy Finance team to create a two-pronged approach to bring a stable electric supply to rural areas and, in the process, to mitigate the effects on climate change. As the Rural Electrification team was helping the ECs prepare sound capex plans, the Sustainable Energy Finance team was supporting a leading bank in its plan to provide financing to the ECs' capex requirements. With these capex plans being approved by ERC, it would be easier for the bank to establish the risk profile or creditworthiness of the ECs' loan applications.

In the case of the Philippine archipelago's island groups and remote villages, the Small Power Utility Group (SPUG) of the National Power Corporation provides them electricity through small generating units that are either connected to the main grid or are off-grid. A number of the ECs in the SPUG areas also take the capex plan training so they can become reliable and creditworthy distributors of rural electricity, and there is more incentive for generators under SPUG to operate in remote areas.

#### It's All About Relationships

Relationships are seen almost everywhere as being critical to the success of IFC programs. But the diversity of cultures and country situations requires that IFC choose program leaders and consultants who are sensitive, adaptable, and accessible in working with clients. Relationships also help in identifying synergies among IFC programs that would greatly contribute to their combined development impact. As IFC moves on to create other opportunities, the good, productive relationships it creates along the way ensure the sustainability of intended program benefits.



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