Improving the Commercial Practices of an Electrical Utility

Electricity Dispenser System in Tanzania: A Component of the Tanzania Power VI Project

Objectives: The Tanzania Electric Supply Company (TANESCO) has experienced major problems with billing and collecting revenues. To (i) improve customer services; and (ii) improve the collection of revenues, the Utility company switched to an electricity prepayment system using Electricity Dispensers (ED). The ED which is an electric meter fitted with a circuit breaker, a computer logic chip and an input device, is installed in the customer's premises. The input devices are either magnetic card readers, similar to those on ATM machines, or numeric keypads similar to a telephone keypad. The input device allows the customer to control electricity-related consumption and expenditure.

Impact on the ground:

The system benefited both the utility company and its customers:

Approximately 8,000 of the projected 40,000 Dispensers have been installed. There has been a marked increase in cash collections.

The customer has more control over electricity use and can buy electricity in the desired quantities. The magnetic card purchased at the vending station is read by the Dispenser at the house. This machine displays an alarm when the value is almost expended.
The customer no longer has to worry about the accuracy of the electric bill. Also, time-consuming and often fruitless interaction with the utility company over inaccurate bills is avoided.

The system helps TANESCO simplify its business operations. It is no longer necessary to read meters in these areas, and TANESCO receives advance payment for the electricity. The system retains all essential customer information, including consumption levels. It automatically monitors deviations from established patterns of consumption.

**Lessons Learned:**

The lag between the installation of Electricity Dispensers and availability of vending machines needs to be shortened to avoid customer frustration. This calls for strong project management. Customers quickly adjust to innovations such as the Electricity Dispenser. Though Dispensers cost more than conventional meters (US$ 80 and US$ 45), the differences in cost are more than offset by the improvement in cash collection and the reduction in meter reading costs. A new initiative of this kind must be accompanied by a systematic and effective consumer information campaign.

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**Key Documents on Auditing and Accounting**


**World Bank's Role in Oil and Gas; Review and Recommendations** *(under preparation).*

**Energy Strategies for Rural Poor People in the Developing World** *(under preparation).*

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Information
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