



GENDER SMART ENERGY SERVICES

Considering gender-based differences in energy needs, uses, and access in demand stimulation programs can increase electricity demand and sustainable revenue for power utilities while supporting women's productivity and economic empowerment.

More rural areas have access to electricity but still have low energy use, which is a problem for power utilities and consumers. Low energy use hinders the financial viability, operational efficiency, reliability, and future growth prospects of power utilities and threatens their ability to provide sustainable, reliable, and affordable electricity.

Power utilities have high fixed costs associated with the construction, operation, and maintenance of power plants and transmission and distribution infrastructure. These include capital investment, staffing, fuel, and maintenance expenses. When utilization is low, the revenue generated from selling electricity may not be sufficient to cover these fixed costs, resulting in financial losses for the utility. Low energy use leads to inefficient allocation of resources where fuel or money is wasted. The utility may then need to increase electricity prices to compensate for the inefficiencies. Furthermore, if electrification investments are not viable, utilities are less motivated to expand infrastructure, which hampers economic activity in underserved communities.

SCALING UP RENEWABLE ENERGY

Through the <u>Scaling Up Renewable Energy (SURE) program</u>, the U.S. Agency for International Development (USAID) partners with power utilities and third-party providers to offer financing and payment schemes for energy-efficient and clean energy appliances that consider gender-based differences in energy needs, use, and access. Examples of productive use appliances include solar water pumps, refrigerators, electric cookers, agricultural processing units, and other products that enable income generation.

SURE experts analyze utilities' qualitative and quantitative data to map out electrification infrastructure, consumption patterns, payment behaviors, and other factors that affect the financial viability of electrification efforts. We conduct a baseline assessment then work with utilities or third-party providers to design a gender-sensitive demand stimulation program that encourages women to use more electricity. Our experts assist partners with program implementation and evaluation. We use mixed data collection and analysis methods to gain a deep understanding of the program's impact on the utility and its female customers. We also use lessons learned to tailor the program and increase its scale and impact.

THE BUSINESS CASE FOR GENDER SMART ENERGY SERVICES

A gender-sensitive demand-stimulation program can engage a larger customer base and increase electricity use. Women represent half of power utilities' customers yet their needs are often underserved. Understanding women's energy needs, use, and access and providing financing for clean energy and energy efficient appliances helps power utilities better serve women and, in turn, increase their use of electricity. Careful consideration of women as decision makers, buyers, and consumers can result in a larger group of potential customers who are interested in a wider range of electrical applications and ultimately more success in stimulating electricity demand.

Electricity demand-stimulation activities make electrification efforts financially viable. Underutilization of energy compromises utilities' financial sustainability and can ultimately reduce service access and quality. Utilities are unable to cover the capital and operating costs incurred to increase access. This contributes to cash flow issues and results in an inability to cover the working capital required to maintain service standards. A gender-sensitive demand-stimulation program can increase the utilities' customer base and increase revenue from new electricity connections, which can be used to invest in upgrades and recover costs associated with electrification infrastructure.

When more women have income, they are better able to consistently pay for electricity and improve their own and their family's quality of their life. Access to clean energy and energy efficient appliances, including irons, refrigerators, sewing machines, electric cookers, solar water pumps, and washing machines can lead to more women starting businesses that create sustainable income for themselves and jobs for others in their community. Access to appliances also reduces drudgery and increases the time women have available for income-generating activities.

IMPACT

Programs that are gender sensitive enable women and girls to reap the full benefits of electricity while increased use of clean energy and energy-efficient appliances expands energy utilization, optimizes power utility operations, increases power utilities' revenue, and supports a sustainable electricity supply. More women save time and money performing tasks like pumping water, cooking, and washing clothes by using solar-powered water pumps, electric cookers, and energy-efficient washing machines. This allows them to pursue education, participate in the workforce, or start businesses. Women's productivity at home and in businesses increases and in turn contributes to economic growth.

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