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Solar Energy + Microfinance = SunPower Afrique

TAGS

Microfinance | Solar Energy | West Africa

Rural West African nights are dark and quiet. In most areas there are no streetlights, no humming of air conditioners, no whirring fans nor refrigerators, no washing machines or stoves. Families and shops use kerosene lamps and candles to live and work at night, as poor electrification constrains the regions' growth and development.

A large part of the West Africa's development has been connected to solid and sustainable microfinance networks in countries such as Togo, whose population of 6.5 million people is served by 160 Microfinance Institutions (MFIs) throughout the country. MFIs are banks that give tiny loans, usually less than \$500-1000, to entrepreneurs and parts of the population that are excluded from the formal financial sector. For 15 years, MFIs in Togo have stimulated significant development in local economies. These MFIs, like other critical institutions and infrastructure such as hospitals, schools and government offices, suffer acutely from the country's energy crisis.

Hydroelectric dams in Ghana and other neighboring states are becoming drier, as effects of climate change become visible in the region. National and regional structures for electricity generation (State distributors, regional fuel pipelines, regional power pools, etc.) cannot meet the demands of growing populations. Togo and its neighbors are in desperate need of a reliable, affordable source of energy.

With their proximity to the equator, relative political stability and small size, these countries are uniquely positioned to not only take advantage of solar power to improve current conditions, but to become leaders in the continent's growing solar industry and economy.

One of the largest obstacles to the use of solar energy is its high startup cost. Microcredit represents an opportunity for all people to be able to afford and use solar energy. An inherent connection exists between the microfinance sector and solar energy. Both rest on ideals of long-term growth and self-sufficient development, and can mutually benefit from the products and concepts that each other offer.

Fabio Rosa, a social entrepreneur who revolutionized rural electrification in Brazil, explained that poor people across the world "could afford solar energy at commercial rates, provided they were given the option to rent it or pay it off slowly - over five to seven years." This slow, steady and successful payment methodology is embodied in microfinance. SunPower Afrique, a nonprofit organization based outside of Philadelphia, PA, is working to implement similar financing for MFIs themselves through a phased model of low-interest loans and patient capital funding. This system will reinforce existing MFI loan management systems and ensure successful repayment.



Above: A loan officer manually tracking repayments on a loan.

With reliable electricity, Microfinance Institutions can:

- Streamline banking functions to better manage loans and reduce overhead.
- Maintain consistent access to financial software programs to ensure reliability and organization of information.
- Implement a centralized and efficient information management system.
- Communicate with microfinance communities worldwide.

Importantly, MFIs represent a significant resource in Togolese communities. In addition to reinforcing development and enhancing microfinance services, MFIs will educate populations about renewable energy by example. MFIs will serve as platforms for community development by displaying the benefits of solar energy through their existing distribution and outreach networks. These structures are ideal mechanisms to expose and distribute knowledge of solar energy throughout the country, and provide the financial capacity to install it. Microfinance clients will be connected to the resources to take small loans from their MFI to install solar modules to supply electricity on their own homes.

To jumpstart the expansion of this "solar connaissance," MFIs that install PV systems will be encouraged to offer a new loan product, *The Solar Loan*, which will enable the larger population to access affordable solar energy.



Above: A microcredit bank that will install solar modules through SunPower Afrique's programs.

With solar energy and microfinance working in tandem, SunPower Afrique hopes to resolve the gap between supply and demand of energy in West Africa in a manner that is renewable, sustainable and possible.

As David Bornstein notes in his book, *How to Change the World*, "The notion that institutions can establish reliable, long-term credit relationships with poor people across the world is no longer radical. It has been proven. And if it works with houses and cell phones, it can work with solar panels, or any other productive assets."

For more information or to support the project please visit <http://www.sunpowerafrique.org/>

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