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FOCUS ON LIBERIA

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Solar lighting outside teacher trainee and faculty residences at Rural Teacher Training Institute in Kakata, Liberia, provides safety and also lights the way home at night, when it is pitch black in the countryside. Until the lights were installed, the newly refurbished residences couldn't be used.

Light Gives Girls and Women a Chance at Night School

At Sanniquelli Central High School in Nimba County, a precious commodity is locked in a closet: compact flourescent light bulbs powered by a solar roof panel and used for night classes.

Night school enrollment in USAID's Accelerated Learning Program has increased 24 percent since LEAP installed the solar panel and four solar "street" lights in each corner of the school yard. Most of the 900 part-time students eke out a subsistence living and tend to basic family needs by day; many are women with babies or are pregnant teenagers who are no longer permitted to attend regular school.

Night school principal Sylvester Gonquoi said women feel safe because of the lights and more attend because they know class won't be cancelled. "When we relied on generators we didn't have the fuel money for regular night classes, and once a generator was stolen. When people hear we have consistent light, they come every time."—N.T.

A student at the Sanniquellie Night School listens intently in class while her child takes a snooze. Solar powered lighting allows students to go to school at night.

Powering Up a Small Business

The Be Honest Fishery lies in a tiny hamlet just outside coastal Greenville in Sinoe County. Fishery owner David Gbanwulue says he wants to attract customers with his motto.

LEAP provided a solar lantern, a street light, and workshop lighting along with business development support from USAID's Liberia Community Infrastructure Program. The light allows Gbanwulue to operate longer hours—before dawn and after dark—to prepare nets and gear, to fish at night, to add to the types of fish he sells, and to sell more.

As a result, Gbanwulue, who used to struggle to buy school supplies and shoes for his children, now employs five assistants and several market women full-time who dry and sell the fish.

"The lights help all my neighbors— people come to read, to do their hair, to charge their phones," said Gbanwulue. "It's very black out here at night and the light frightens away criminals."—N.T. .

Investors Wanted for Renewable Energy

The Liberian government now seeks international partners and capital investors to scale up solar power use, as well as biomass and hydropower to meet the country's electrification needs for industry and economic growth. In her 2009 State of the Union address, President Johnson Sirleaf cited USAID's LEAP, stating "with the recorded success of the pilot projects, we will now move along quickly to launch full-scale implementation…" The challenge is largely financial. Solar-powered systems are cost-effective over years of use but require large up-front investments. Public-private partnership is needed.

LIBERIA FINDS SOLAR POWER GETS THINGS MOVING AGAIN

By Nena Terrell

MONROV IA, Liberia—Liberians who live, study, or work outside the limited electric grid of the capital, Monrovia, do not have affordable, reliable light. A place to charge a mobile phone is a daily quest.

Less than 2 percent of rural areas and about 10 percent of the urban capital area have modern energy sources.

People who live in thatched or makeshift dwellings use hazardous candles and kerosene lamps—there are no fire fighters to come to the rescue. A fortunate minority have generators that run on expensive fuel.

Renewable energy is emerging to fill the need for power, allowing the rebuilding country to leapfrog over polluting fuels into "green" energy using the country's abundance of sun and water.

In 2006, the USAID Liberia Energy Assistance Program (LEAP) began helping the post-war government of President Ellen Johnson Sirleaf create a national energy policy, including a strategy to reach the most underserved.

In two years, LEAP showed the benefits of low maintenance solar technologies at 19 sites in schools, clinics, small businesses, and public buildings supported by other USAID programs. Some examples of these pilot sites and how they renewed people's lives and livelihoods follow.

Workers install a solar-powered street light in Robertsport. Solar light panels are attached to sturdy aluminum mounting racks, each including a maintenance-free battery and a "dusk to dawn" charge controller.

Lights Revive Social Life in Robertsport

Roberstport is the capital town of Grand Cape Mount County, known for its scenic beaches, lakes, and hills. But it had no street lights for nearly 20 years until LEAP installed 10 at the center of the town.

A cook at a small camping lodge catering to tourists from Monrovia said shops are open longer and the lights enable her to work at night and get home safely. And the lights revived social life after years of conflict.

"Now people come out at night; they aren't afraid anymore; they meet and talk. I think the lights bring us more together," she said.—N.T

A solar-powered vaccine refrigerator keeps medicines cool.

Solar Refrigerator Preserves Vaccines and Saves Lives

At the Sakonnedu Health Clinic in Lofa County, LEAP provided a solar-powered vaccine refrigerator and a portable solar lantern for night births and other emergencies. Before receiving the refrigerator, vaccines weren't always available when needed as Sakonnedu staff had to bring ice packs from the county capital to keep vaccines in a cold box.

Opportunities to vaccinate infants coming from remote villages were often lost. A health worker at the clinic, which is run by International Medical Corps, credits the solarpowered refrigerator with saving lives: "Before a lot of newborns died, mostly from tetanus; since the refrigerator came, no more."—N.T.

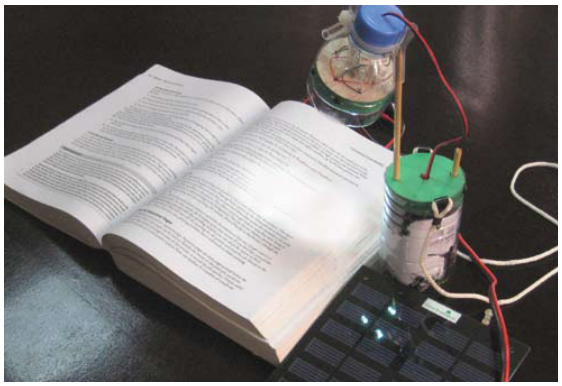
Entrepreneurs Turn Plastic Bottles into Solar Lamps

A few Liberian groups are testing out a new business using empty plastic water bottles to make solar-powered lanterns with three tiny LED (light-emitting diode) bulbs. The small lantern serves as a flashlight or flexes to become a reading light.

The solar torch was developed and donated by Green Energies, LLC, for micro-enterprises in Tanzania. A start-up assembly tool kit costs $100 and light kits are $15 each. The lanterns are sold for about $25 each, including a small (1.5W) solar panel for recharging the batteries.

In Liberia, people can spend up to $15 each month on kerosene and candles, so makers of the small lights expect brisk sales.

After training, a person can assemble four or five lights in a day.—N.T.



Women and a few men are making it their business to build solar flashlights/ reading lights using recycled plastic water bottles and a solar charging panel.