Solar Electric Light Fund

2014 ANNUAL REPORT

Whole Village Development Model

SELF's Whole Village Development Model takes an integrated approach to community empowerment, using a diverse mix of solar energy solutions to improve the lives of people who don't have access to electricity. By working closely with communities and adhering to our operating principles of **SELF Determination**, **SELF Help,** and **SELF Reliance**, we seek to ensure benefits in education, health, water and agriculture, enterprise, and community:

EDUCATION: powering lights, computers, and wireless internet services.

HEALTH: powering clinic lights, labs, diagnostic equipment, and vaccine refrigerators.

WATER & AGRICULTURE: powering water pumps for clean drinking water and year-round crop irrigation.

ENTERPRISE: powering centers for small businesses and providing electricity for machinery and equipment.

COMMUNITY: electrifying homes, community centers, water wells, and street lighting.

ENERGY IS A HUMAN RIGHT™

LETTER FROM OUR EXECUTIVE DIRECTOR

Dear Friends,

SELF's accomplishments in 2014 demonstrate just how far we have come since 1990 when we first began our fight against energy poverty. Back then, our efforts focused on implementing solar lighting solutions at the household level. Today, we are harnessing solar power in a variety of sophisticated ways to improve the health, education, and economic wellbeing of entire communities. The proof of our work is here in SELF's 2014 annual report.

In Northern Benin, we achieved our goal of completing our Whole Village Development Model in the villages of Dunkassa and Bessassi by installing two solar-powered micro-enterprise centers and solar street lights. Nearly 60,000 people now have access to schools, health centers, fresh fruits and vegetables, clean water, and small business centers, all powered by the sun. This is a defining moment for our organization, and we are eager to take this model and implement it around the world.

Our work in Colombia continues to expand. We originally started with the design and installation of battery-free, solar-powered vaccine refrigerators and freezers at three health facilities. We have since laid the groundwork to complete a solar-hydro-powered micro-grid in 2015 to provide all of the electricity required by a health clinic, school, community buildings, and a coffee production facility in Sabana Crespo, a traditional Arhuaco village of 7,000 people.

In Haiti, we are going beyond our Whole Village Model by developing solar projects and programs that are benefitting the entire country. We are installing two micro-grids that will benefit more than 50,000 people by providing them with electricity for their homes and a micro-enterprise center to spur economic development. To help increase access to fresh food, we completed two new Solar Market Gardens that use solar-powered pumps to draw surface water from a lake and river for drip irrigation. In addition, we have partnered with other non-governmental organizations to distribute solar cookers and lanterns to numerous communities. To share our knowledge of solar power, we have partnered with the Government of Norway and the Centre de Technologie Moderne d'Haiti, a leading vocational school in Port-au-Prince, to develop Haiti's National Solar Training Center, a premiere solar systems training center and three-year degree program.

SELF's focus is to help improve people's lives through the power of the sun. Every day, with your support, we are doing just that. On behalf of our organization and all of those we serve, thank you.

Warm regards,

Bob

Robert A. Freling
Executive Director

2014

BENIN

The Kalalé District is home to more than 100,000 people. Ninety-five percent of them rely on subsistence farming. Crop production is limited to the rainy season because of a lack of accessible water for irrigation. As a result, villagers suffer from starvation and malnutrition. SELF arrived in 2008 with a novel plan to install solar-powered pumps to draw water from wells for a drip irrigation system to sustain gardens year-round. These Solar Market Gardens (SMGs), cultivated by the community's women's farming collectives, provide produce for family consumption and income generation.

Since 2008, SELF has installed eleven SMGs in the District of Kalalé. Approximately 400 women work the gardens, and 3,000 family members directly benefit from them. In total, 60,000 people have access to fresh fruits and vegetables grown throughout the year.

In its first few years of working in Benin, SELF saw the opportunity to use solar to provide power to more than just gardens. As a result, photovoltaic systems have been installed for solar-powered well water systems, schools and health centers in Dunkassa and Bessassi. In addition, 34 solar-powered street lights have been installed to increase evening activity in the villages and improve public safety, particularly for women.

This year, SELF's Whole Village Development Model goal was achieved with the installation of two 5.2 kilowatt (kW) solar-powered, micro-enterprise centers to serve Bessassi and Dunkassa. Three buildings, constructed in the shape of a horseshoe, will house ten shops that provide essential goods and services to the community. The addition of these services in otherwise energy-impoverished villages will increase the overall quality of life, attracting teachers, doctors, and other professionals who often refuse to work in rural locales due to a lack of amenities.

In Benin, solar-powered drip irrigation and progressive agricultural practices enable women farmers to grow enough produce to feed their families and sell surplus food at market.

BENIN

Efforts were made to continue refining the SMGs to render them more sustainable. A study on the progress and sustainability of the SMGs by the University of California, San Diego has been completed. We expect the results to verify such key indicators as average costs of operating the gardens, amounts of produce kept versus sold, produce sales prices, income generated per group and per individual, factors contributing to some gardens outperforming others, and social and economic impacts on the beneficiaries. Based on these results, efforts will be made to optimize the production of the gardens if additional funding becomes available. Of note is the fact that our local NGO partner, ADESCA, is now run by an all-women board of directors.

Based upon its success in Benin, SELF believes its Whole Village Development Model can be replicated around the world to help communities lift themselves out of poverty.

With the introduction of solar power, cooperation among the villagers in the District of Kalalé has risen to a new level.

AFRICA

COLOMBIA

SELF has developed a model to power indigenous villages throughout Colombia. This work is being funded principally through a USAID grant and will be demonstrated in Sabana Crespo, one of seven villages assessed by SELF with the active support of the Government of Colombia. Sabana Crespo is a traditional Arhuaco village with a population of more than 7,000 people. SELF is providing a 12.5 kW solar-powered micro-grid system coupled with hydro power and backed up by a diesel generator. This model is designed to meet all energy demands of the village's school, community buildings, health facilities, and a coffee processing enterprise. Savings from not using diesel fuel at the health clinic and coffee facility will be applied to the cost of the micro-grid's operations and maintenance, provided by local technicians and trained villagers. SELF spent 2014 planning and coordinating the micro-grid project in anticipation of its installation in 2015.

SELF's involvement in the Arhauco community began in 2012 with the installation of battery-free, solar-powered, direct-drive vaccine refrigerators and freezers at three health facilities. Subsequently, there was a fourth clinic installation. Healthcare workers in the villages report that the vaccine refrigeration has been overwhelmingly successful.

Because of its track record with Colombia's indigenous Kogi, Arhuaco, and Tucano populations, SELF was asked to provide solar electricity to 20 remote health posts, accessible only by foot, and to install two micro-grids in the villages of Gunchukwa and Villa Fatima on the eastern border near Brazil. Funding is being sought for these projects.

By piloting the use of solar energy in Sabana Crespo, SELF is helping some of Colombia's indigenous communities preserve their culture and autonomy while meeting their health care, educational, nutritional, commercial, and community needs.

The indigenous village of Sabana Crespo in Colombia's Sierra Nevada Mountains illustrates the type of remote outposts where SELF delivers solar solutions.

HAITI

SELF is honored to play a continuing role in Haiti's recovery since the devastating earthquake that occurred there in 2010. Through the power of solar, we are helping advance health care, education, agriculture and economic development.

A funding partnership with the Inter-American Development Bank (IDB), United Nations Environment Programme (UNEP), U.S. Agency for International Development (USAID), and the Government of Norway has produced a wide range of solar initiatives, many of which were launched 2014.

We are nearing the completion of a multi-faceted project funded by IDB, UNEP, USAID, and the Government of Norway which involves two micro-grids, a solar cooker component, solar water heater demonstration project and a solar lantern distribution project.

HREC Micro-grid. SELF set the groundwork for installing a 140 kW solar powered micro-grid to serve 53,000 people in the three communities of Port-à-Piment, Coteaux and Roche-A-Bateau located on Haiti's Southwest Coast. The National Rural Electrical Cooperative Association (NRECA), the partner organization structuring the project, has named it the Haiti Rural Electrical Cooperative (HREC). It is anticipated that installation will begin in June 2015. As part of the project, SELF will also be installing more than 250 streetlights.

Fe-Yo-Bien Micro-grid. SELF began preparation to install a solar micro-grid in Haiti's Central Plateau. Originally intended as a stand-alone system to provide electricity to a micro-enterprise center that has been under construction, the 13 kW solar array will now power a one-kilometer power line serving 10 businesses in the micro-enterprise center, along with 50–70 small business stalls along the community's central street. The system is funded by IDB and the Kellogg Foundation.

Solar Cooker Project. SELF has partnered with One Earth Designs, a manufacturer of an advanced solar cooker, and Haveserve, a community development NGO operating in LeBrun, to distribute lease-to-own solar cookers to women entrepreneurs. With funding from IDB and the Agua Fund, the women are promoting the devices for personal and commercial use. The program includes training and before-and-after studies to gauge the environmental and financial impacts of the project, as well as user acceptance. Based upon the program's success in 2014, it is anticipated that the project will move forward with distribution of additional ovens in 2015.

Solar Hot Water. In a project to demonstrate the benefits and feasibility of solar hot water collectors, a system is being planned for installation at the Port-à-Piment Hospital to provide hot water for patient wards. Completion is expected in August 2015.

Solar Market Gardens are helping improve nutrition in Haiti.

HAITI

Solar Lantern Project. SELF has partnered with SAFICO, a distributor of solar lanterns, and Fonkoze, Haiti's largest micro-finance organization, in a project to distribute up to 4,500 lanterns. SELF will be providing IDB funds to Fonkoze that will, in turn, loan the money to 200–300 retailers of the lights as seed money to start their businesses. SAFICO's role is to train the retailers and provide distribution of the lights.

Solar Market Gardens

Following the completion of one of SELF's SMGs with Zanmi Agrikol (ZA) in 2012, SELF and the Kellogg Foundation agreed to install another one-hectare SMG to support agricultural students at ZA's Corporant campus. This particular SMG will be the first of its kind to pump water directly from a river.

In addition, SELF completed another one-hectare SMG, funded by the Clinton Foundation, on the northeast coast of Haiti. The garden is cultivated by a cooperative that has nearly 30 farmers. This project is innovative in that, for the first time, water is being pumped from a lake and using a high-pressure drip irrigation system. It eliminates the need for the construction and use of an expensive reservoir component as part of the water system.

National Solar Training Center

The Government of Norway announced that it is providing support for a three-year project that will create the National Solar Training Center (NSTC) in partnership with Centre de Technologie Moderne d'Haiti (CETEMOH), a leading vocational school in Port-au-Prince. The NSTC will feature two- and three-year degree programs for those with prior electrical knowledge who seek employment in designing, installing and maintaining PV systems. Intended to be Haiti's premier photovoltaic (PV) training facility with fully equipped labs for practical experience in installing all types of PV systems, the center will also offer short-term courses and develop spin-off courses for other vocational schools in Haiti. Project development begins in early 2015, with SELF assembling a team of curricula developers and a project coordinator who will work with CETEMOH. It is anticipated that the first course will commence in the spring of 2016.

Optimizing the Vaccine Cold Chain with Solar Powered Refrigeration

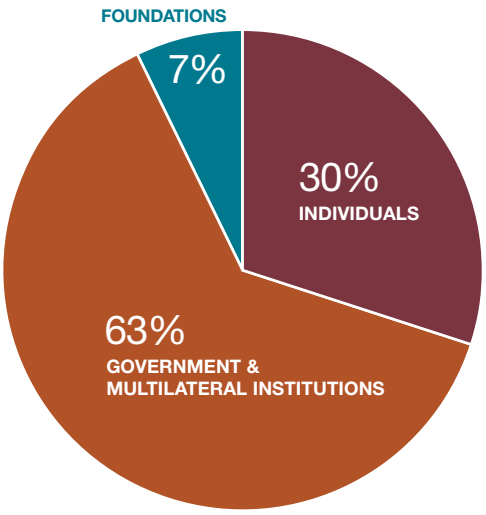
One hundred fifty-three solar vaccine refrigerators were designed and installed incorrectly in post-earthquake Haiti by organizations other than SELF. The refrigerators all malfunctioned. In 2013, SELF was approached by the U.S. Centers for Disease Control (CDC) to assess the problems and propose solutions for the vaccine refrigeration crisis. SELF was contracted by UNICEF to provide assistance to the Haitian government's Ministère de la Santé Publique et de la Population (MSPP) to improve its vaccine cold chain. SELF completed a detailed assessment and plan to repair the malfunctioning refrigerators. It also

identified new installation sites in districts throughout the country where high volumes of vaccines are stored. In 2014, 74 large-volume solar battery-free vaccine refrigerators were successfully installed in those districts by SELF, and most localities have reported near perfect temperature control and operation. Plans call for SELF and MSPP technicians to repair the 153 failed refrigerators and install 29 new vaccine refrigerators between 2015 and 2016.

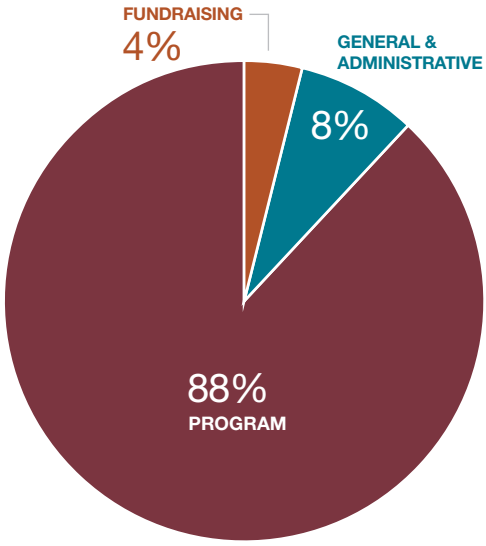
SELF's influence is global. SELF Project Manager, Steve McCarney, advises the World Health Organization's (WHO) Performance, Quality and Safety project that is responsible for setting equipment standards and test protocols for solar vaccine refrigeration equipment. Experience gained from the Haitian projects, as well as the other SELF vaccine cold chain projects in Benin and Colombia, is routinely reported to the WHO to help drive best practices.

FINANCIAL HIGHLIGHTS

SELF Revenue in FY14



Program Efficiency in FY14



In 2014, SELF focused on implementing large-scale projects funded by government and multilateral institutions. This included design and procurement for micro-grids and procurement of vaccine refrigerators in Haiti. These projects, resulting in a large increase in SELF's fee-for-service revenue, will continue into 2015. SELF also wound down earlier grant projects in Benin and Haiti which produced a net decrease in temporarily restricted net assets as we drew down on those earlier grants and moved increasingly to contract-supported work. Total revenue increased from 2013 to 2014, and given existing and anticipated new contracts, we expect that trend to continue into 2015.

The financial results depicted on the next page are derived from the SELF audited December 31, 2014 consolidated financial statements, which received an unqualified opinion. SELF's complete, audited financial statements can be found on www.SELF.org.

FINANCIAL HIGHLIGHTS

STATEMENT OF ACTIVITIES
For the Period Ended December 31, 2014
(With Summarized Financial Information for the Year Ended December 31, 2013)

	UNRESTRICTED	TEMPORARILY RESTRICTED	2014 TOTAL	2013 TOTAL
REVENUE				
Grants and donations	$ 759,450	$ 479,774	$ 1,239,224	$ 1,434,894
Contracts	1,373,947	-	1,373,947	526,409
Investment income	1,406	-	1,406	1,184
Other income	-	-	-	-
In-kind Donations	183,698	-	183,698	1,47,379
Net assets released from restrictions:				
Satisfaction of program restrictions	989,502	$ (989,502)	-	-
TOTAL REVENUE	**3,308,003**	**(509,728)**	**2,798,275**	**2,109,866**
EXPENSES				
Program services	2,933,570	-	2,933,570	2,330,045
Management and general	251,079	-	251,079	242,836
Fundraising	159,345	-	159,345	144,682
TOTAL EXPENSES	**3,343,994**	**-**	**3,343,994**	**2,717,563**
CHANGE IN NET ASSETS	(35,991)	(509,728)	(545,719)	(607,697)
NET ASSETS, BEGINNING OF YEAR	278,343	1,334,717	1,613,060	2,220,757
NET ASSETS, END OF PERIOD	**$ 242,352**	**$ 824,989**	**$ 1,067,341**	**$ 1,613,060**

ORGANIZATION

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Institute for Advanced Study

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Bill Richardson
Former Governor of New Mexico

Jonathan Silver
Senior Advisor, Energy Investments
The Riverside Company

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Mary Green

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President Emeritus & Co-founder
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Darren Anderson
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Jeff Lahl
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Rick LaRue
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Claudalex Lauture
Senior Technician, Haiti

Steve McCarney
Project Manager

Sandra Phillips
Project Manager

Amanda Silver-Westrick
Office Manager

Interns

Rohan Bhargava

William Edman

Alyssa Snider

Rohan Lewis

Advisor

Kumiko Nishiyama

Solar Electric Light Fund

www.SELF.org

Solar Electric Light Fund
1612 K Street, NW
Suite 300
Washington, DC 20006

202.234.7265
202.328.9512 **Fax**

INFO@SELF.ORG