

## Innovative Design and Research

Development is fast changing. The United Kingdom and United States are seeking out, testing and scaling innovative solutions alongside more traditional approaches. Novel ways of thinking are benefiting the world's poorest, and represent game-changing potential in the post-2015 environment.

### MDG 2 & 3 | Supporting Girls' Education in South Sudan

Using innovative technological approaches, the United Kingdom aims to transform the life chances of a generation of children in South Sudan—especially girls—through education.



**Teacher in South Sudan registering school's attendance on government website via SMS.**  
Photo credit: Andreea Câmpeanu

Thanks to this effort, over 150,000 girls in primary school and 50,000 in secondary school are expected to be supported through campaigns in local languages to raise awareness of girls' education, innovative cash transfers to girls and their families, and through investments by the program and the Government of the Republic of South Sudan for improved accountability and results by using school capitation grants. Already in 2014, more than 2,000 schools seeking grants based upon the size of student enrollment have opened bank accounts, prepared budgets and plans, and received funds to spend on practical education quality improvement measures that will make schools better and more welcoming places for girls. In addition, the program is

using knowledge and evidence innovatively through the design and nationwide roll-out of the South Sudan Schools Attendance Monitoring System, which already has 3,000 participating schools and 500 reporting on attendance.

Given the fragility in South Sudan, the program's innovative and flexible design has enabled it to continue to operate in seven out of the ten states in South Sudan.

### MDG 4 | Original Designs for Clean Drinking Water

Contaminated drinking water results in illnesses like cholera, typhoid and diarrhea, and causes an estimated one million deaths a year among children under the age of five.



**Dispensing chlorine from Dispenser for Safe Water, Khasolo waterpoint, Kenya.**  
Photo credit: Jonathan Kalan/Evidence Action

Many communities in developing countries seek solutions through protected communal water sources, but these systems are ineffective when clean water is stored in the household and then re-contaminated. Chlorination addresses this problem and has been shown to reduce childhood diarrhea

by 40 percent, and it keeps water safe to drink for up to three days. While liquid and powder chlorine are available in household packages in retail stores, consistent chlorine use remains low, especially among the poor.

The U.S. Agency for International Development (USAID), through Development Innovation Ventures (DIV), is investing in Dispensers for Safe Water at Innovations for Poverty Action (IPA) that incubated the program. It is now managed and implemented by Evidence Action. Evidence Action scales proven interventions that are based on rigorous research with new business models to serve millions. The innovation focuses on how chlorine is delivered: chlorine dispensers with diluted liquid chlorine are installed directly at the local water hole or stream. Customers simply add a small amount of chlorine when they fetch their water at the source. Local community health promoters maintain the dispensers and provide community education, creating social pressures to increase adoption. Dispensers for Safe Water resulted in adoption rates averaging 43% that have stayed consistently high over time. Currently, over two million people have access to safe water through the program.

Today, with U.S. support, Dispensers for Safe Water is scaling in Kenya, Uganda and Malawi, with plans to add more countries. The goal is to provide 6.26 million people with access to dispensers over three years. It is also encouraging replication of the intervention by others.

## New People, New Partners

Development challenges—from eliminating extreme poverty to adapting to climate change—can best be met by coalition. Not merely through bilateral government arrangements, but through participatory development and by creating “greater than the sum of the parts” collaborations spanning the public, private and non-profit sectors.

### MDG 4 & 5 | New Partnerships in Clean Cookstoves in India

Despite the dangers of sustained exposure to smoke, three billion people around the world cook on open fires. Illness related to breathing smoke results in over four million deaths per year. USAID, through DIV, is investing \$1 million in new partnerships and people in India to combat this scourge. DIV’s model seeks breakthrough solutions, minimizes risk and maximizes impact through stage financing, rigorously testing impacts and cost effectiveness, and scaling proven solutions via public or private sector partners.



**In Gheghtha Village, Poona cooks chapatis on a HomeStove under USB-powered light.**

Photo credit: Arley Smude (BioLite)

Through its original design and partnership, the HomeStove by BioLite reduces the amount of firewood required by families and cuts toxic pollutants by 90 percent, nearly 5 times more than other available improved cook stoves. As an added incentive for potential consumers, HomeStove uses excess energy produced during cooking to power a USB charger for small electrical devices like cellphones and lights.

BioLite and solar powered lamp innovator, Greenlight Planet, are breaking down barriers to clean cookstove adoption by expanding their market-based model for retailing cookstoves in 200 villages in Orissa, India. With support from USAID through DIV, BioLite and Greenlight Planet are conducting evaluations on different stove models and pricing to reach further scale.

### MDG 7 | Low Cost, Renewable Energy

Catalyzing development solutions requires new partners and solutions alongside traditional approaches. Increasing access to electricity is essential for creating a brighter future for all. The United Kingdom is tackling this issue through support to partners M-KOPA in Kenya and Persistent Energy Ghana (PEG), who are enabling poor people to buy clean energy products in small installments, using mobile banking platforms such as M-PESA, a very successful mobile banking phone service seed-funded by UK aid and Vodafone in Kenya.

Both M-KOPA’s and PEG’s pay-as-you-go technology allows poor consumers to buy solar power for their homes without the usual significant outlay that most cannot afford. Instead, customers pay off the cost of the product in small installments using their mobile phones.

M-KOPA’s innovative payment model enables communities to gain access to technologies that improve their lives and the environment. The aim is to reallocate spending on traditional, more harmful fuels

into the gradual use and ownership of a cleaner, better quality solar power replacement like solar home systems at a daily cost often less than what a poor household would pay for the inefficient and dangerous form of lighting.



**A mother in Eldama Ravine using clean energy to help her child with her homework.**  
Photo credit: Georgina Goodwin and M-KOPA

PEG, meanwhile, installs remotely controlled and managed solar micro-grids and solar home systems in low-income, off-grid households. After a year, customers own the solar home system.

UK support to M-KOPA is contributing to their goal of reaching one million homes by 2018, alongside other partners, including the Shell Foundation and the GSM-A, through the Mobile-Enabled Community Services program.

To date, M-KOPA, through UK support, has just provided clean energy to 100,000 customers in Kenya in just 15 months of operation. PEG has installed systems in over 400 households in Ghana, bringing solar light, phone charging and appliances to over 2,000 people. PEG is hoping to reach over 20,000 households in 2015 and over 100,000 in 2016.