



PHOTO: JERRY BARNETT

Malawi Country Report 2014

SolarAid report of SunnyMoney activity in Malawi



A welcome from François

This report outlines what the SunnyMoney team have achieved in Malawi in 2013. It includes an overview of our enterprise's innovative business model and a summary of the social impact solar lights can have for Malawian families that previously relied on kerosene, batteries or candles to light their homes.



As Operations Director of SunnyMoney I am proud to introduce you to a team that are dedicated to building a sustainable market for solar lights across the country. We work with the Ministry of Education and with a growing network of agents to make these products available and affordable for rural low-income families. In this way we have more than quadrupled our sales since 2011 and in 2013 sold an average of 2,000 solar lights per month.

Our motivation for growing these figures is the impact that we know each and every solar light has for a family living without electricity in Malawi. Clean and free solar light means that families can save, children can study and homes are safer. Our goal is to bring the choice to invest in quality solar products to every person across the country.

Thank you for your interest in SolarAid and SunnyMoney Malawi.

FRANÇOIS GORDON
OPERATIONS DIRECTOR

SunnyMoney is a social enterprise wholly owned by international development charity SolarAid. It forms part of an innovative charitable model that takes a business-based approach to tackling poverty and climate change. Any surplus revenue generated by SunnyMoney is reinvested back into the charity to support our goal: the eradication of the kerosene lamp from Africa by 2020. Malawi is one of the five countries that we were working in during 2013. Read more about the model on page 4.



Malawi: at a glance



| | |
|---------------------------|------------------------------|
| CAPITAL CITY: | Lilongwe |
| CURRENCY: | Malawian kwacha |
| LANGUAGE: | Chichewa; English; 16 others |
| POPULATION: | 15.91 million |
| GDP: | \$4.264 billion |
| MAIN EXPORTS | Tea, minerals, tobacco |
| PEOPLE LIVING IN POVERTY: | 50.7% of the population |



The energy problem

Only 7% of the population in Malawi has access to electricity, which means nearly 14 million people are living without power. Over 50% of the population lives below the poverty line, and the majority of them live in rural areas – the least likely to benefit from grid electrification.

Without light, opportunities for earning, learning and socialising are severely limited. The productive day is cut short so that children cannot study, parents cannot work and families have little time together after the sun sets. When darkness falls, millions depend on costly, polluting energy sources to light their homes, schools and businesses. This dependency locks people into a cycle of poverty; draining their income, damaging their health and causing fatal burns and fires. Burning fuels like kerosene also releases carbon dioxide and black carbon into the atmosphere, which is bad for the environment.

In 2008, 86% of households in Malawi relied on kerosene for lighting but recent economic and political issues have led to restrictions on kerosene supply. In some areas of Malawi kerosene is now commonly traded on the black market and more people are using poor quality battery powered torches.

“Energy is the thread that connects economic growth, increased social equity and sustainability. But, widespread energy poverty still condemns billions to darkness, ill health and missed opportunities for education and prosperity.”

– UN SECRETARY GENERAL BAN KI-MOON

93% OF HOUSEHOLDS DON'T HAVE ACCESS TO ELECTRICITY

RURAL MALAWIAN HOUSEHOLDS SPEND AROUND 15% OF THEIR INCOME ON LIGHTING.

MANY FAMILIES RELY ON BATTERY TORCHES THAT ARE EXPENSIVE AND UNRELIABLE.

What SunnyMoney does

SunnyMoney is building a sustainable market in Malawi through the sale and distribution of pico-solar lights.



SOLAR LIGHTS ON DISPLAY IN A SMALL SHOP

In 2013, SunnyMoney in Malawi provided access to clean, safe, bright solar lights across Northern and Central Regions. With support from the Ministry of Education, SunnyMoney work closely with Teacher Development Centres to arrange Head Teacher Meetings, bringing groups together to learn about solar so they can offer their students and community the chance to purchase a solar light.

Through SunnyMoney Malawi’s Dealer Networks, the teams sell lights through local shops and agents. This is an area of work that SunnyMoney is seeking to further develop and expand over the coming year to provide better access and availability to these solar lights across the country.

The SunnyMoney model

“SunnyMoney has cracked the code on the distribution side of solar lanterns in East Africa”

– DR. WIEBER BOER, CEO OF TONY ELUMELU FOUNDATION

SunnyMoney is part of an innovative charitable model based on trade not aid; a social enterprise founded by international development charity SolarAid in 2008.



HEAD TEACHERS WITH THEIR SAMPLE SOLAR LIGHTS

SolarAid and SunnyMoney believe that sustainable development is vital to achieving our shared goal of eradicating the kerosene lamp from Africa by 2020. Rather than give solar lights away, SunnyMoney was established to sell them at a full but fair retail price in rural African communities. This creates markets for pico-solar lights in remote areas where low volumes mean that their sale is currently challenging. Charitable funding from SolarAid enables SunnyMoney to undertake the expensive and difficult task of building trust in, and access to, solar lights in areas with little infrastructure and poor retail networks. We know that when a thriving market takes shape, other players will enter the market, ensuring better supply, reduced prices and more availability to all.

This business-based approach not only gets solar lights to people quickly but provides jobs and business opportunities. We know that for some it is a struggle to find money to invest in a light so SunnyMoney is also working on financing initiatives, such as pay-as-you go technologies, to make the products more accessible.

SunnyMoney’s field teams visit an area and raise awareness of solar lights by working with schools. Teams are able to deliver lights efficiently through this trusted network and support local agents to stock solar products as local demand grows. This community-based model means that SunnyMoney supports the growth of a sustainable solar market. As a social enterprise wholly owned by SolarAid, all of SunnyMoney’s income is reinvested back into the charity’s work. Donations are therefore recycled time and time again, giving more people access to clean, safe solar technology.



A STUDENT WITH HIS FATHER AND HIS NEW SOLAR LIGHT

“Charity money has only one life but if you transform it into social business money, then it becomes a life of eternity.”

– MUHAMMED YUNUS,
2006 NOBEL PEACE PRIZE WINNER

“My children use [the solar light] for studying. They are able to read at night which was not possible initially when we had no solar lamps. It’s so bright, it’s a good light that you can’t imagine!”
Evelesi Lwasi, a mother of six living in the district of Salima

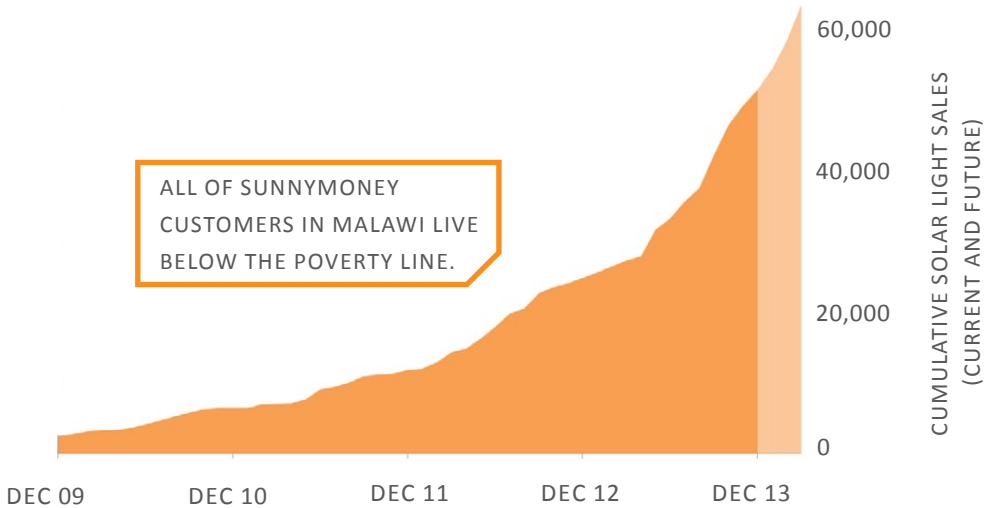
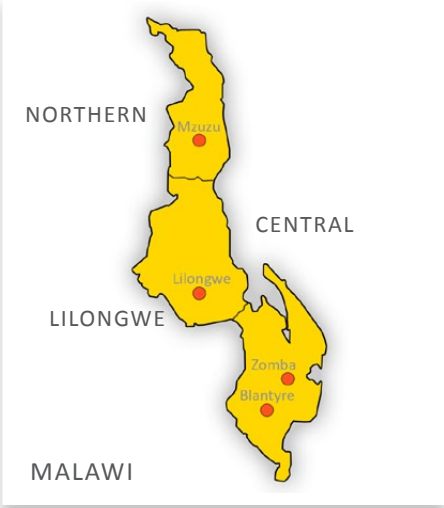


PHOTOS LEFT & ABOVE: SOLARAID\BRAVE MITHON

SunnyMoney sales

Malawi sales figures have been growing rapidly since 2011.

At the end of 2011, 11,000 lights had been sold; by the end of 2013 this had increased almost fivefold to 51,532. The team have been focusing on Northern and Central Regions this year. In 2014 we shall also be expanding into Southern Region.



The solar lights

SunnyMoney are a product-neutral distributor of solar lights.

SunnyMoney sell more than 10 different types of lights, all rigorously tested and World Bank quality assured. They are durable, reliable, last up to five years and all come with a warranty. The teams work with our customers to ensure they are getting what they want from the lights, feeding this back to manufacturers to drive improved standards and new designs. Below are our customers' current favourites:

The *d.light S2* is our biggest seller and most popular light. A study lamp giving out four hours of bright light, it provides a focused beam making it ideal for studying or working.



The *SunKing Pro* from *Greenlight Planet* has three brightness settings and lasts up to 30 hours. With a display screen showing the hours of light available, and phone charging capacity, it is especially popular with teachers and business owners.

The *Barefoot Power PowaPack Senior* is a four-light system with a 5-watt panel which can be used to light up a home or to extend opening hours for small businesses. It contains a mobile phone charging kit with six adaptors.



To see more lights sold in Malawi, visit www.sunnymoney.org

The impact in Malawi

Solar lights have a tremendous impact on the income, education and health of families in Africa. Our monitoring, evaluation and research provides evidence of the impact that SunnyMoney has in Malawi.

2013: The big picture

- **22,800 SOLAR LIGHTS SOLD**

- **135,000 PEOPLE** HAVE ACCESS TO SAFE, CLEAN, BRIGHT LIGHT

- **52,000 PEOPLE** EXPERIENCING BETTER HEALTH THANKS TO REDUCING THE USE OF AIR-POLLUTING KEROSENE LAMPS

- **\$2.9 MILLION** SAVED FOR FAMILIES FROM REDUCING SPENDING ON LIGHTING ALTERNATIVES LIKE KEROSENE, CANDLES AND BATTERIES*

- **74 MILLION HOURS** EXTRA STUDY TIME FOR CHILDREN USING THE SOLAR LIGHTS FOR HOMEWORK*

- **11,500 TONNES** OF CARBON DIOXIDE EMISSIONS AVERTED DUE TO REDUCED KEROSENE LAMP USE*

*IN TOTAL, OVER THE LIFETIME OF THE SOLAR LIGHTS

Nearly 50% of solar light users we have interviewed used kerosene lamps as their main source of lighting prior to buying a solar light.



After a solar light purchase, an average family displaces the regular use of **half a kerosene lamp**. This means that over the lifetime of a solar light, up to **500kg of carbon dioxide** emissions are averted.



Much closer to home, reducing kerosene light use also means less indoor air pollution. A third of customers report **improved health** after buying a solar light, including a reduction in respiratory illnesses, coughing, eye irritation and chest problems.



Because SunnyMoney distribute solar lights through the school network (find out more about that on p. 4), nearly 70% of customers tell us that their children use the solar lights to study. This means that children are doing an **extra two hours of homework each day**, after dark.



85% of Head teachers we've talked to say that there is a difference in students with solar lights; notably there is an **improvement in performance and attendance at school** as a result of this.



Because families are reducing their expenditure on other lighting products, this is **saving them over \$25 a year**, on average. That's 10% of household income; a significant amount. The top most common uses of savings are **food, school fees and investment in farming inputs or business**; this shows how a solar light can start a virtuous cycle of development and progress.



Families talk of **improved security and safety** due to this brighter, more reliable lighting. Families also have the opportunity to have improved social interaction and **family time** without fear of running out of kerosene or batteries for lighting.

Our research work

SolarAid have a dedicated department that conducts research and impact measurement.

This department was set up in late 2012 and since then has conducted over 12,500 research interactions – that means observations, interviews and surveys. We interview members of the public and conduct market studies to understand existing behaviours of household lighting and spending, as well as awareness and opinion on pico-solar lights. We talk with solar light users to find out any change the lights have brought. We also work with external research partners to verify our own work and ask bigger questions around the effectiveness of what we do *and* the effectiveness of pico-solar lights as a tool for development.

Our research results allow us to continually learn and improve the way we work; adapting our programmes to ensure we reach the most people possible. It also allows us to advise on policy, make recommendations to governments and fully explain the impact a pico-solar light can have for families in Malawi.



MALAWI RESEARCH TEAM

External research

A report published in December 2013 by **The William Davidson Institute** assessed SunnyMoney’s activities and efforts in reducing poverty’s negative impacts on children age eight years and younger. The *Access to Clean Lighting and Its Impact on Children: An Exploration of SolarAid’s SunnyMoney* found that:

- ✓ Once a solar light is purchased, families begin to save money in the long term, by reducing kerosene costs and kerosene-related medical expenses – enabling more financial resources to be channelled towards their children’s needs.
- ✓ There is increased ability for children to study longer hours and spend more time with parents and siblings on educational activities.
- ✓ The children also benefit from the reduced exposure to kerosene’s toxic fumes and reduced risk of burns.
- ✓ Children in the community benefit from the improved quality of ambient air and reduced emission of carbon dioxide, released when burning kerosene.

“A lot of things have changed. The house is brighter and the children are happy.”
Weakness Mwenelupembe, solar light owner, Karonga

If you have any questions about our research work, please contact our Director of Research & Impact Kat Harrison on Kat.Harrison@solar-aid.org.

Meet a solar customer

Leonard Nyondo bought a solar light from SunnyMoney.

Leonard bought a *d.light S1* solar light during the SunnyMoney Schools Campaign at his children's school, Mbande Primary in Karonga. Three months later he explained to our research team that the solar light has saved him money, improved his family's health and supported his children's education.

Leonard has five children and brings in the family income from farming. Their household has no electricity and before the solar light they relied solely on kerosene to light the home. He told our research team:

"I was spending a lot of money buying kerosene and batteries... I can now buy things I failed to buy when using kerosene for example sugar and exercise books."

Leonard's family now save \$65 a year and he also told us that his children are able to study for longer:

"Children no longer suffer to read at night unlike in the past when the kerosene lamp would go off. Their performance at school has also improved... [and] the smoke of paraffin no longer affects their eyes when reading."

Not only that, the family noticed an improvement in health:

"Smoke in the house which caused coughing has stopped. Our clothes no longer smell [of] smoke."

Meet a teacher

Mr Ngwira, a teacher in Karonga, attended a meeting at a local school in his district where he met the SunnyMoney team and was told about the benefits of solar lighting. Mr Ngwira was given a solar light to take back to his school and demonstrate to his colleagues, students and community members.



After seeing the solar light, some of the parents at Mr Ngwira's school decided to buy one and SunnyMoney arranged for it to be delivered through the school. Many of his students are now benefitting from brighter, safer light for longer and when we spoke to Mr Ngwira this year he told us that:

"Some learners are now selected to good schools within Karonga, a thing that has created history at our school! ... Solar lamps have simplified our life generally; we are able to save money as compared to when they were using kerosene to sustain studies for the children."

Working with teachers helps SunnyMoney to educate communities about the benefits of solar and reach more people.

The future

Tens of thousands of solar lights now shine across Malawi, but there are still nearly 14 million people living off-grid with no access to power.

We are proud of what we have achieved but there is still so much more to do. In 2014, we aim to bring solar lights to tens of thousands more households across the country. For this to happen we need to:

- ✓ Expand and adapt our innovative model to reach those most in need;
- ✓ Strengthen our partnership with the Malawian government to support a more sustainable solar market for all;
- ✓ Build on our research to share knowledge and use the learning to improve the effectiveness of our work;
- ✓ Work alongside fantastic donors and partners who understand and support our approach.

"I was searching for [a solar light] but I couldn't find the product."

Misheck Achizimani, Dowa District

We cannot do this alone. Join us in the fight for clean light in Africa and help us to eradicate the kerosene lamp for good.

Get in touch

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