

The Role of Social Protection in Ending Energy Poverty

Making Zero Carbon, Zero Poverty the
Climate Justice Way a Reality

Policy Brief

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**Mary Robinson
Foundation**
Climate Justice

Adopting a development first approach – putting Zero Carbon, Zero Poverty the Climate Justice Way into action

The global community is tasked with ending poverty and enabling sustainable development while tackling the climate crisis¹. To deliver this action on the scale and in the timeframe required to avoid dangerous climate change, countries around the world must act in solidarity and invest in the transition to zero carbon and zero poverty in all countries. While developed countries must rapidly peak and reduce their emissions, developing countries are being asked to develop without emissions. This is the greater challenge and they must be enabled through unprecedented levels of support from the international community.

To ensure that all people are enabled to take part in the transition to a zero carbon and zero poverty future, innovative, targeted approaches will be necessary to reach the very poorest people and communities. This policy brief explores one such targeted mechanism. Social protection systems can be leveraged to rapidly and efficiently extend sustainable energy services to a country's poorest people – people who will not be reached by market based mechanisms alone. Adopting this approach to complement existing energy access strategies will enable governments to roll out energy services at scale, reaching the furthest behind first. A climate justice approach to achieving universal energy access can advance climate action and sustainable development simultaneously.

¹ In 2015 the international community committed to implementing the 2030 Agenda for Sustainable Development (UN Resolution: A/RES/70/1, available at: <http://bit.ly/1OTd4Sr>) and the Paris Agreement on climate change (UNFCCC Decision 1/CP.21, available at: <http://bit.ly/245GrVI>).

The Universal Energy Access Challenge

Today, 1.2 billion people live without access to electricity and 2.7 billion people still rely on harmful and inefficient cooking facilities². In Africa there are 620 million people without access to electricity and only 1 in 5 households have access to clean and modern cooking facilities³. Energy is the engine of development – a high level of energy poverty severely limits a country’s ability to achieve its development goals.

All people have the right to development and it is in the interests of all that this right is realised using clean, affordable and sustainable energy. When people have access to energy services, outcomes in fields such as health, education, economic growth and poverty reduction improve⁴. However, traditional, fossil fuel based energy production is a significant contributor to the greenhouse gas emissions⁵ that cause climate change, so alternative forms of energy are needed to ensure that the eradication of energy poverty does not exacerbate climate change. The impacts of climate change have the potential to undermine, or even roll back, development gains. Therefore energy poverty must be brought to an end by providing access to clean, renewable energy services that enable truly sustainable development and climate justice for all.

To achieve universal energy access it is imperative that the distribution of energy services is considered alongside energy production. Currently, investment in energy services responds to development priorities such as industrialisation and the rising demand from businesses and households already connected to energy services; it is not typically geared towards delivering energy to those furthest behind first⁶. Tackling energy poverty will require innovative distribution strategies to overcome the challenge of reaching the poorest people.

² International Energy Agency: *Role of sustainable energy in ending poverty*. Available at: <http://bit.ly/1kczPPG> (Accessed 26 April 2016)

³ International Energy Agency (2014) *Africa Energy Outlook – World Energy Outlook Special Report*. Paris.

⁴ International Institute for Applied Systems Analysis (2012), *Global Energy Assessment; Ch 2: Energy, Poverty and Development*. Cambridge University Press

⁵ US Environmental Protection Agency: *Overview of Greenhouse Gases*. Available at: <http://1.usa.gov/23Y9LCi> (Accessed 26 April 2016)

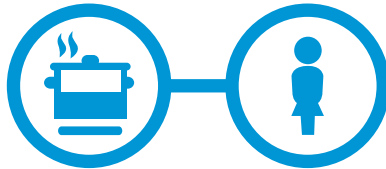
⁶ Overseas Development Institute (2015) *Speaking Truth to Power: Why energy distribution, more than generation, is Africa’s poverty reduction challenge*. Working Paper 418. Available at: <http://bit.ly/294rBKw>

The Universal Energy Access Challenge

Ending energy poverty and providing access to sustainable energy brings transformative benefits that enhance the wellbeing of a family.

For a family living in energy poverty...

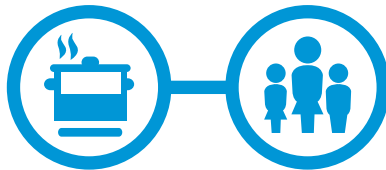
Access to cleaner cooking facilities saves time and lives:



Women using more efficient cookstoves

**spend 70 hours less per year
collecting fuel**

and can save over an hour a day in cooking time.⁷



Access to cleaner cooking can help

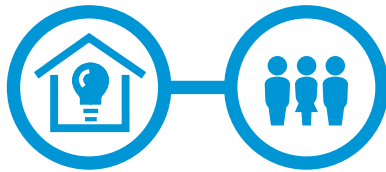
**avoid 4.3 million
premature deaths each year,
predominantly women
and children,**

that result from household air pollution⁸ due
to traditional cooking methods.

⁷ Global Alliance for Clean Cookstoves (2015) *Gender and Livelihoods Impacts of Clean Cookstoves in South Asia*. Available at: <http://bit.ly/1A412As>

⁸ World Health Organisation (2016). *Household air pollution and health*. Fact sheet N°292 Available at: <http://bit.ly/1m10zV0>

Household lighting improves education:



In the Philippines, children with access to electricity at home

attend school for two years longer

than those from homes lacking it.⁹

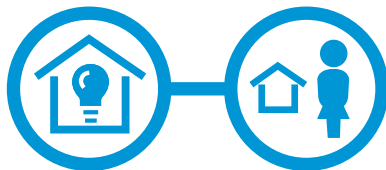


In India,

school enrolment is increased by 6% for boys and 7.4% for girls

from homes with electricity.⁹

Access to electricity helps a family to become economically empowered:



In Nicaragua access to reliable electricity

increases the likelihood of rural women to work outside the home by approximately 23%¹⁰



Electricity gives family members the

opportunity to charge mobile phones, increasing connectivity and employment opportunities

and while providing access to services like mobile banking and health information.¹¹

⁹ UNDESA (2014) *Electricity and education: The benefits, barriers, and recommendations for achieving the electrification of primary and secondary schools*. Available at: <http://bit.ly/28SKMZW>

¹⁰ Grogan and Sadanand (2013): "Rural electrification and employment in poor countries: Evidence from Nicaragua," *World Development* 43 pp. 252-265.

¹¹ GSMA (2015) *Bridging the gender gap: Mobile access and usage in low and middle-income countries*. Available at: <http://bit.ly/28JcV47>

The International Context

The 2030 Agenda for Sustainable Development - which includes, within Sustainable Development Goal 7, a target to achieve universal energy access by 2030 - calls on countries to “*reach the furthest behind first*”. In addition, the Paris Agreement on climate change commits countries to limit warming to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C. Cleaner, renewable and affordable energy sources are required to enable sustainable development without further exacerbating climate change. The Sustainable Development Goals (SDGs) echo the need to advance climate action, particularly Goal 13, *Take urgent action to combat climate change and its impacts*, and Target 7.2 which calls on states to “*increase substantially the share of renewable energy in the global energy mix*” by 2030.

Access to energy will enable millions of people around the world to lift themselves out of poverty; and access to renewable energy will ensure that development is sustainable for people and the planet. In order to reach the furthest behind first - to reach the people who cannot afford to pay the upfront cost of energy access - targeted approaches are required to provide access to sustainable energy services. Using social protection systems is one such targeted approach.

Using social protection systems to reach the furthest behind first

Social protection systems are put in place to advance the well-being and security of a country's most vulnerable citizens by protecting them from deprivation. Social protection can meet the essential needs of human survival by providing basic social and economic security. Social protection systems can also develop and unleash human potential, by facilitating structural change, increasing stability, advancing social justice and cohesion and promoting economic dynamism⁷.

Some forms of social protection, like child welfare payments or old age pensions, are universal in scope and benefit the whole population. Others enable the poorest people to access essential services like healthcare, education and nutrition. This targeted support can take many forms and examples include cash transfers, education subsidies and food and nutrition supplements. In these cases, social protection systems provides access to services that would otherwise be beyond the reach of poor and vulnerable families. Where targeted social protection systems are already established, they can be used to deliver access to sustainable energy services to poor households. By targeting those most in need with appropriate, off-grid energy solutions, affordability issues and energy distribution challenges can be overcome.

⁷ *International Labour Organisation (2003) Social Protection: A Life Cycle Continuum Investment For Social Justice, Poverty Reduction and Sustainable Development. Geneva*

Why are targeted approaches necessary?

The phrase “base of the economic pyramid” is often used to describe a large section of the global population considered to be income poor. However, within this grouping there are significant differences in people’s ability to pay to access services. People living in severe poverty (defined as \$0.70 per person per day) face fundamentally different social and economic realities to people living in extreme poverty (defined as \$1.25 per person per day)⁸. People-centred development policies must acknowledge the heterogeneous nature of people classed as income poor, and the need for differentiated approaches to reach the very poorest people.

People living in the most vulnerable situations typically will not have the disposable income to spend on improved energy services and as a result get by on dirty fuels that are often labour intensive (e.g. collecting firewood and making charcoal) and although affordable day-to-day, are expensive on an annual basis (for example, rural families across Africa are spending on average 10% of household income for 4 hours of light at night using kerosene, torches or candles⁹). As a result, making sustainable energy services accessible for the poorest requires some form of financial support. Furthermore, while the benefits of access to cleaner sources of energy may be apparent to policy makers, the purchase of renewable energy services may not be prioritised by people living in poverty as their choice may be between energy services and other household essentials like food or education.

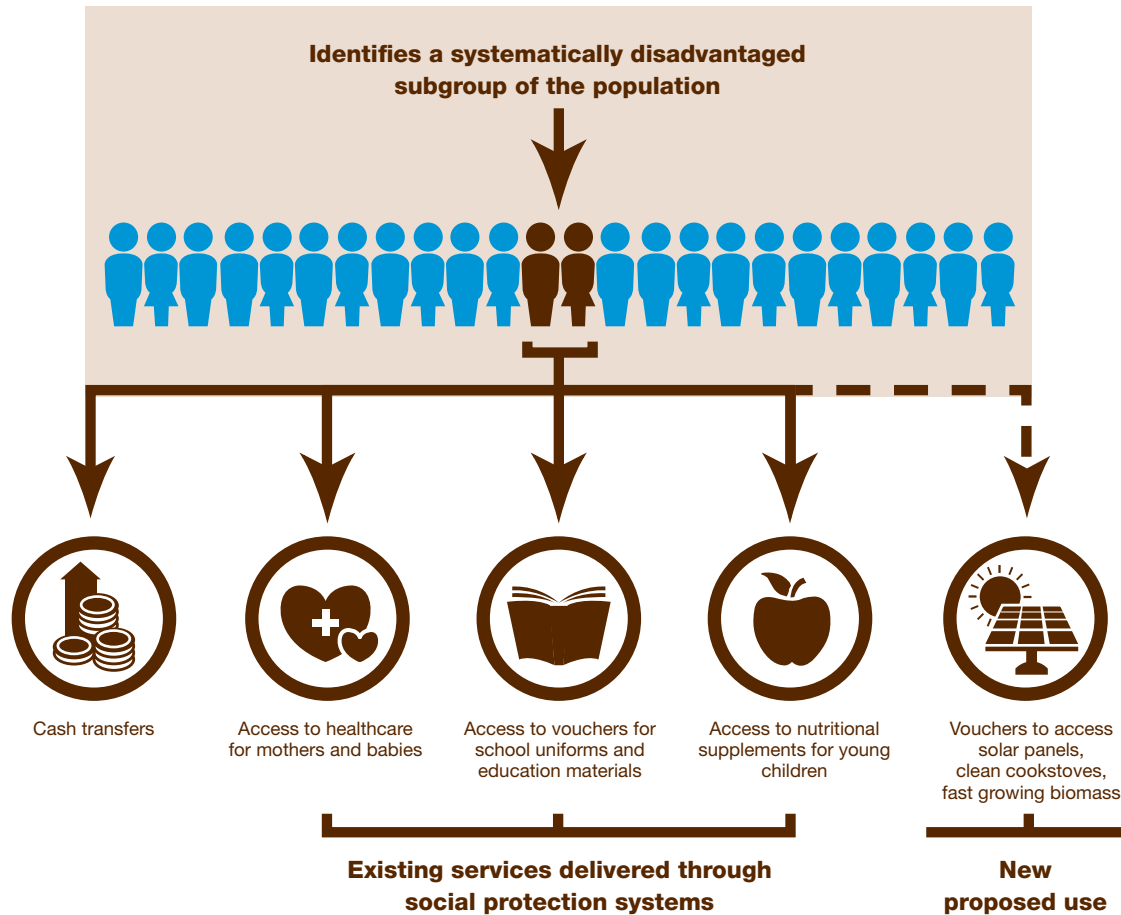
Devising targeted strategies to reach the poorest, especially in off grid or hard to reach areas, can help poor households to access the minimum threshold energy consumption without assuming unmanageable financial risk. Research has shown that well-designed subsidy schemes targeted at the poorest households are essential to achieving universal access to sustainable energy¹⁰.

⁸ Overseas Development Institute (2014) *The Chronic Poverty Report 2014-2015: Getting to Zero*. London

⁹ Overseas Development Institute (2016) *Accelerating access to electricity in Africa with off-grid solar*. London

¹⁰ A 2016 study of potential energy and climate policy scenarios by Cameron et al. indicates that 100% subsidies for the very poorest households are required in order to ensure 100% of the population has access to modern fuels. The full article can be found here: <http://bit.ly/24h7YVJ>

Using social protection mechanisms to provide access to sustainable energy – how it works



Targeted beneficiaries can include:

Labour constrained households | The elderly | Female headed households
People with disabilities | People living in chronic poverty

The benefits of using social protection systems to deliver access to sustainable energy

In some of the most poverty stressed regions of the world, social protection systems are delivering essential services to those most in need. There are distinct benefits to leveraging these systems for the delivery of sustainable energy services.

Social protection systems are established and are increasing in scope

Many countries have initiated and extended social protection systems in recent years. Today, 27% of the world's population enjoy access to comprehensive social protection systems and the International Labour Organisation provides technical assistance on social protection systems in more than 135 countries worldwide¹¹. The 2030 Agenda for Sustainable Development commits countries to implementing nationally appropriate social protection systems for all¹², highlighting the need to extend social protection globally.

In Africa alone, there has been an unprecedented increase in the number of social protection systems. In 2010, 27 African member states signed the Yaounde Tripartite Declaration on the implementation of the Social Protection Floor in recognition of the urgent need for all African member states and social partners to start the effective and rapid implementation of a social protection floor for all Africans¹³. This increasing social protection coverage provides a delivery framework uniquely positioned to enable the rapid scaling up of access to sustainable energy services.

¹¹ International Labour Organisation: *Time for Action*. Available at: <http://bit.ly/1T1qg50> (Accessed 26 April 2016)

¹² United Nations (2015) *2030 Agenda for Sustainable Development*. New York (A/RES/70/1)

¹³ International Labour Organisation (2010), *Yaounde Tripartite Declaration on the implementation of the Social Protection Floor*

Social protection systems are reaching the poorest

Targeted social protection systems reach those most in need. Typically, the recipients of social protection include the chronically poor and those who are economically vulnerable due to social context or standing. Countries with targeted social protection systems have already identified the people who are poorest and most vulnerable. The infrastructure and delivery mechanisms to reach them are already in place.

There is a two way relationship between lack of access to energy services and poverty. Access to energy can help alleviate poverty, improve incomes and enhance living conditions¹⁴. Energy poverty is strongly correlated with income poverty and lack of access to electricity amongst the chronically poor is due to both the unavailability of supply and to unaffordability.

Social protection systems brings together ministries to provide a holistic response

By its nature a social protection system, and particularly one which seeks to deliver transformative benefits, requires an interdisciplinary team drawn from different sectors and levels of decision making. Experiences gathered by the Mary Robinson Foundation – Climate Justice (the Foundation) indicate that those working on social protection and those working on energy have had few opportunities to work together to date¹⁵.

At a meeting where the Foundation brought together social protection and energy practitioners it was found that linking social protection and energy access can provide an effective mechanism for delivering clean, affordable, sustainable energy to the poor. However, for this to happen in practice, ministries working on social protection, energy, environment and development need to come together to collaborate in a way they may not have done before. This will be most effective when it is driven by high level political leadership.

¹⁴ *International Institute for Applied Systems Analysis (2012), Global Energy Assessment; Ch 2: Energy, Poverty and Development. Cambridge University Press*

¹⁵ *Mary Robinson Foundation – Climate Justice (2013), Meeting the energy needs of the poorest – a role for social protection.*

From theory to practice: Experiences from Malawi

In Malawi, efforts are underway to link the delivery of sustainable energy services with a targeted social protection system, the Social Cash Transfer (SCT) programme. In early 2012, the Malawian Government set itself a target of delivering 2 million energy efficient stoves to households by 2020. The government identified the architecture of one of the country's social protection systems – the SCT - as a means through which these energy efficient stoves and additional cleaner and sustainable energy services could be delivered to the poorest households in Malawi.

Thanks to the leveraging of the social protection system to deliver climate friendly energy services to those who would otherwise not have access, this initiative is maximising co-benefits for the wider community. In addition to the households in receipt of cookstoves through the SCT, the project also empowers local women through cooperative manufacturing of the cookstoves. To further enhance the economic, social and environmental impact of the project, measures have been put in place to stimulate a parallel market producing and selling cookstoves to families not in receipt of the SCT.

The following stories of change offer an insight into the design of the project and the experiences of recipients

Ms. Cassimu is a 23 year old mother living in Madero village in Balaka. She is a recipient of the SCT and through this received a cookstove in 2013. She had been aware of some of the benefits of the cookstoves over the traditional three stone cooking method before she received her own stove through the SCT programme. “My friends who had the stove [needed very little] firewood but, at the same time, could cook faster than me” she says.

Ms. Cassimu was quick to point to the benefits that access to cleaner cooking facility has brought about. “Life has improved a lot health wise,” she says “the family is not coughing as before. The pots are not as dirty and I do not use a lot of energy to clean them”. There are more benefits to the family beyond the time and effort saved in cooking, Ms. Cassimu explains. “During cold season, the cookstove is used as a heater for the family, my child and husband stay warm throughout.” She also feels safer working with the cookstove, saying when using the three stone method, there was a greater risk of her infant burning itself in the open fire.

Three billion people, or 40% of the world population, rely on traditional use of biomass for cooking. The rural poor, mostly women, largely only have access to fuels that are inefficient in converting to energy. Lack of access to cooking fuel forces women and children to spend many hours gathering fuel - up to 5 hours per day- or spend significant household income purchasing fuel. Women provide 91% of households' total efforts in collecting fuel and water, and women have an average working day of 11-14 hours, compared to 10 hours on average for men. A reduction in time spent collecting fuel and cooking enables women to spend more time with their children, tend to other responsibilities, enhance existing economic opportunities, pursue income-generating or educational opportunities and leisure activities and rest - all of which contribute to poverty alleviation.[1]

[1] *Global Alliance for Clean Cookstoves*. Available at: <http://bit.ly/28Rmyvz>

Photo: UNHCR/Sebastian Rich



Without the SCT mechanism, Mrs. Cassimu would not have benefitted from access to the cookstove. “I am very happy to be part of the programme,” she says, “I have witnessed a lot of changes in my cooking and how it has helped me to save firewood”.

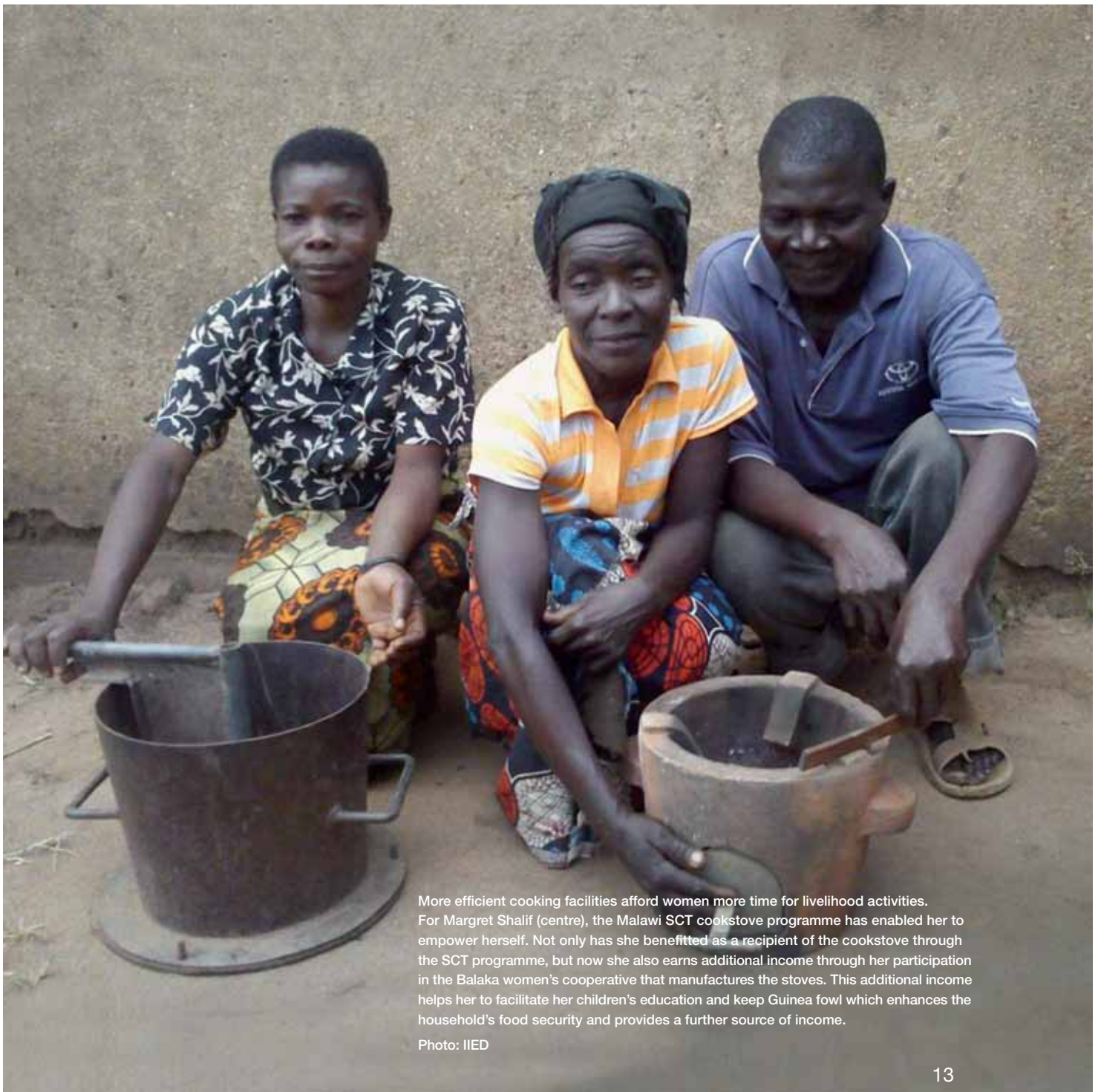
Another recipient of a cookstove through the SCT programme, mother of five Mary Dickson, was keen to point out the transformative effect the cookstove had on her family’s way of life. “Now that I can cook fast, my children can eat before going to school and they will not be late” she says. “I have benefited a lot too from being part of this programme, I am able to save on firewood and I can do other household chores now while I am cooking”.

KEY MESSAGE: For recipients of the SCT programme, access to cleaner cooking means less time collecting firewood, improved standard of living and better health.

EMPOWERING WOMEN

The increased demand for cookstoves arising from the SCT programme in Malawi offers an opportunity to engage women in stove production through women led cooperatives. The stove making cooperatives increase the incomes of women and, in doing so, boost the resilience of poor households.

This model also allows for the development of technologies that are context appropriate as the women use their knowledge of local needs and preferences to design and produce the cookstoves. This local specification increases the uptake and use of the stoves.



More efficient cooking facilities afford women more time for livelihood activities. For Margret Shalif (centre), the Malawi SCT cookstove programme has enabled her to empower herself. Not only has she benefitted as a recipient of the cookstove through the SCT programme, but now she also earns additional income through her participation in the Balaka women's cooperative that manufactures the stoves. This additional income helps her to facilitate her children's education and keep Guinea fowl which enhances the household's food security and provides a further source of income.

Photo: IIED

“My lifestyle has improved a lot since I started producing cookstoves,” says **Mrs. Shalif, a 44 year old mother of eight**, who had previously earned a living farming cotton and pigeon peas. “I am able to send my children to school from the proceeds of the cookstove sales. I have no problem buying school uniforms for my children or anything that they may need for school. I have also bought Guinea fowl for the first time in my life and I eat the eggs from them. They are multiplying and I will be able to sell some soon”.

Being part of the cooperative has enabled Mrs. Shalif to become more empowered. “Since I started producing cookstoves, my social network has broadened a lot. For example, I am able to associate with members of other social clubs who buy cookstoves that we have produced. We can share ideas and knowledge of how to develop our homes through this interaction. I also support [my relatives] financially through the sales that I get from the manufacturing of cookstoves”.

KEY MESSAGE: For Margret Shalif, involvement in the production of cookstoves serves not only as a source of income - it has also enabled her to empower herself.

Lydia Kadwala is a 62 year old mother of 3 who also cares for 8 grandchildren. Mrs. Kadwala had earned her living from growing and selling tomatoes but now she supplements her income by selling cookstoves. “There is a high demand for cookstoves because of the benefits that I normally explain to people regarding saving firewood. I have customers that are not on SCT but because they have seen the benefits of using a cookstove compared to a three stone fire, they are coming to buy. Sales are increasing steadily”.

Mrs. Kadwala explains that her livelihood options have improved as a result of selling cookstoves. “My standard of living has been uplifted. I have bought goats, pigs and chickens for my family and I know that [if there is an emergency that requires money], I can easily sell one of my goats or chickens and get the assistance that I may need”.

There are challenges that come with this success. Mrs. Kadwala says that sometimes it is hard to keep up with demand. “I am the only one who is authorised to sell cookstoves from our cooperative, and it is proving to be too much for only one person to handle”.

KEY MESSAGE: An increasing awareness of the value of clean cookstoves is creating new market opportunities for cookstove vendors.

DEVELOPING NEW MARKETS

The Malawi SCT project is intentionally designed to stimulate demand for cookstoves and develop a new market. For each cookstove that is delivered through the social cash transfer, the vender gets a second stove to sell. As word spreads regarding the benefits of the technology, demand increases and community members who are not in receipt of the stove through the SCT purchase them of their own accord. This doubles the number of stoves distributed, amplifying the benefits to the community and enhancing the climate change mitigation aspects of the project.

Efforts to reach the national target of delivering 2 million energy efficient stoves to households by 2020 are led by a national cookstove taskforce chaired by the Government, and comprised of relevant private sector, NGO, donor and government representatives. The Ministry of Gender, Children and Social Welfare (MoGCSW) delivers a monthly electronic cash transfer to the poorest (10%) labour constrained households - mostly the elderly, female headed households, child headed households and households with chronically ill members. Irish Aid supports the task-force and has been working with relevant Government partners and Concern Universal in devising programmes to roll out stoves at scale.

In implementing the SCT programme, the MoGCSW screens potential recipients and builds recipient capacity to make best use of their weekly payment. Director of Social Protection Services in the MoGCSW, Dr. Esmie Kainja highlights the importance of providing the stoves to the social cash transfer recipient, “These households don’t have the money to spend on stoves. The little money they receive they are required to spend on essentials. The priority is for them to eat”. Without the programme, these households would have no access to cleaner cooking facilities.

To enable the stove distribution, SCT recipients are issued with a coupon at the SCT paypoint that can be redeemed through a network of local distributors (merchants / shops / kiosks or agents). For each stove delivered to the SCT recipients the distributors receive an additional stove that they can sell to other customers. Dr. Kainja explains the distribution of the stoves is part of the MoGCSW’s linkage and referral system - a systematic monitoring, reporting and referral system for children and their families on the programme who may require special attention to ensure that household members are able to maximise the impact of SCT.

A further advantage of leveraging the SCT is that all distributed stoves can be audited for climate finance. Climate finance generated from the programme can be either invested in community infrastructure, be paid directly to households or be used to provide further clean energy solutions for poor rural households.

“For me, the key factor was our multi-sectorial approach” explains Dr. Kainja. “Food is linked to health, health is linked to education – the needs are interrelated so the services need to be integrated and this requires working across Ministries.” By way of example Dr. Kainja highlights how the involvement of the Department of Forestry in the project has not only brought the Ministry of Natural Resources, Energy and Mining into a closer working relationship with the MoGCSW, but has also made communities more aware of the importance of a healthy environment; “without this project, the beneficiaries would not appreciate the value of their forests. We are raising awareness of the benefits that come to the community from preserving their forests”.

LISTENING AND LEARNING

The women engaged in the manufacture of the cookstoves from initial pilot project cooperatives are now travelling to other districts to train members of new cooperatives as the project grows. “The beneficiaries have become the trainers,” Dr. Kainja says, “that’s real empowerment”. She emphasised the importance of listening to, and learning from, the recipients of the cookstoves. “The women are now inputting into the design of the cookstoves, they are the experts. Recently they have been experimenting with the type of soil used to produce the stove. They tested four types and settled on the one they are happiest with. We are learning from them.”

The future of the Malawi SCT project

The distribution of the cookstoves is only the first phase of the Malawi SCT project. In the second phase, the same delivery mechanism will enable access to solar powered lighting units for use within the household. The final phase is a biomass initiative involving bamboo planting around the recipients' households and aims to establish energy self-sufficiency for the recipients by 2018.

At the end of the three phases all SCT households will be energy self-sufficient and the carbon revenue stream can continue to be used to improve or upgrade energy devices or to contribute to the cost of the SCT programme.

Over the lifetime of the project it is envisioned that the Government, with donor support, will have created the necessary conditions to allow the private sector, (small scale women-led stove production groups and distributors) to take over and lead the process of delivering stoves to 2 million homes.

Policy Recommendations

Using targeted social protection systems to deliver sustainable energy services can accelerate progress towards universal energy access and progress towards a zero carbon and zero poverty future. However, in order to achieve this, certain enabling conditions must be in place:

- **High Level Political Commitment**

For sustainable energy access to be integrated into social protection systems, high level political commitment to providing energy services to the poorest is required. This political support must also be reflected at sub-national and local levels.

- **International Support**

Access to climate finance can allow developing countries to pilot and scale up the delivery of sustainable energy through social protection systems. Creating avenues for finance from the Green Climate Fund, the Clean Development Mechanism or the emerging Sustainable Development Mechanism to support such projects would ensure that support reaches the people most in need. Investing in access to sustainable energy for the poorest and vulnerable members of society also enhances resilience to the impacts of climate change and reduces greenhouse gas emissions.

- **Policy integration and cross-ministerial coordination**

Policy integration informs a holistic approach that brings together the expertise necessary to deliver access to sustainable energy through social protection. Inter-ministry cooperation and coordination is necessary to ensure the success of this approach as a range of ministries need to engage, including ministries of social protection, environment, energy and finance.

- **Multi-stakeholder engagement and meaningful community participation**

If social protection systems are to deliver on access to sustainable energy, a range of stakeholders from the public sector, private sector, civil society and local communities must be involved in the design and implementation of policies and programmes. This includes the people living without access to energy, local and national governments, civil society, international organisations, bilateral donors, private investors, the corporate sector, microfinance institutions, research institutions and social entrepreneurs. Poor people must be recognised as key actors in their own development from the outset, rather than passive recipients of services.

The Foundation is grateful for the work of the International Institute for Environment and Development (IIED) and Irish Aid which contributed to the Malawi Case Study featured on page 10.



■ www.mrfcj.org