

MAKING THE CASE

Sub-Saharan Africa

Case Studies on Inclusive
Economic Development



Center for
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1.0

Background



1.1 Sub-Saharan Africa

Sub-Saharan Africa is home to the world's largest free trade area and a 1.2 billion people market.¹ Even though the region has the world's lowest GDP, in 2018, eight of the twenty fastest growing economies in the world were located in the region.² However, for the majority of sub-Saharan Africa's population, economic gains have not resulted in higher incomes and more jobs, and high levels of inequality are found both between and within countries. Today, four of the five most unequal countries in the world are sub-Saharan African.³ Although women in sub-Saharan Africa are more likely to be affected by poverty and inequality, women's economic empowerment is an important factor in strengthening the region's economic and social prospects.⁴ Through its human and natural resources, sub-Saharan Africa has the potential to achieve inclusive growth and eradicate poverty.⁵

Access to electricity and the clean energy transition present both a challenge and an opportunity in sub-Saharan Africa. Although by 2013 the region saw an increase in the number of people with access to electricity due to enhanced policies, investments and infrastructure, the COVID-19 pandemic, 'reversed that progress in 2020, and the number of African people without access in 2021 is expected to continue to increase [...] and reach nearly 600 million'.⁶



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Over 600 million people in the region have no access to electricity and about 940 million people depend on harmful fuels for cooking.⁷ A lack of access to power as well as energy poverty affect the health, education and incomes of women and off-grid communities.⁸ For example, household air pollution from a lack of access to clean cooking facilities causes almost 490,000 premature deaths per year in sub-Saharan Africa, with women and children being the most affected.⁹

Having said that, the clean energy transition also represents a meaningful opportunity for inclusive economic growth in the region. Addressing the climate crisis and women's empowerment have the potential to become contributing factors in achieving a successful clean energy transition.¹⁰ Against this background, this case study will focus on the social enterprise Solar Sister as an example of efforts to build inclusive economies while addressing the challenges of gender equity, climate change and energy access at the same time.



Addressing the climate crisis and women's empowerment have the potential to become contributing factors in achieving a successful clean energy transition.¹⁰

1.2 A double-empowerment model

Beginning in Uganda, Solar Sister was created with the purpose of empowering women by providing inclusive economic opportunities through 'last mile distribution of clean energy products'. Since their inception in 2009, their programme has been replicated in countries across sub-Saharan Africa such as Kenya, Tanzania and Nigeria. Solar Sister embodies their mission of 'investing in women's clean energy businesses in off-grid communities in Africa'. Their model takes the innovative approach of recruiting, training and supporting women entrepreneurs in building business and bringing clean energy to their communities. Women who take part in the programme receive comprehensive training and ongoing mentorship addressing the business, technology and leadership skills needed to not only build but also sustain clean energy businesses.¹¹ They build female entrepreneurship and improve access to clean energy through home-grown connections. Although the female-owned businesses created through this programme are considered microenterprises — their impact is wide reaching. They partner with locally rooted nonprofits, international NGOs and private partners in the clean energy space who provide technological and logistical support to their projects and products. To strengthen programme implementation, their teams are culturally trained and align their programmes to the existing policies (social, financial, political, etc.) in the region. While there are a range of solar-powered products, their staple product is a solar lantern as an alternative to the candles and kerosene lamps traditionally used in communities.



Solar Sister not only aims to be financially sustainable but equally strives to generate environmental, economic and social benefits for the local communities. While most of the impacts from Solar Sister can be seen at the social level by distributing energy devices to marginalised communities and through women empowerment, the business model is also directed to environmental benefits through emission reductions and to economic benefits through business linkages, secondary enterprise creation and increased productivity.¹² Quite distinctly, their double-empowerment model not only invests in the entrepreneurial potential of women but also creates instant return by providing an essential source of clean energy directly to homes in rural African communities that once lacked access to electricity.

BACKGROUND

Additionally, they utilise a threefold impact model: social, environmental and economic. Focusing on all three has created an opportunity to build more equitable economic environments. Women, who may be traditionally vulnerable to deeply entrenched gender inequalities in their communities, become key players in their own families and local economies by providing rural access to electricity. Solar Sister utilises a data-driven approach to measure their impact.¹³ In 2016, Santa Clara University's Miller Center for Social Entrepreneurship conducted a study that found that Solar Sister's solar lanterns had effects on end users that were more comprehensive and far-reaching than the provision of light.¹⁴ They have already provided over 3 million people across Africa with solar energy and clean cookstoves and also created 6,400+ female clean energy entrepreneurs.¹⁵



2.0

Built for All: Applied



2.1 Pillar One: Equitable access to resources and opportunities

Solar Sister's mission aids in providing equitable access to resources and opportunities¹⁶ to women in rural sub-Saharan Africa and enables them to 'start, grow and sustain successful clean energy businesses, to build a brighter future for themselves, their families, and the world'.¹⁷

Strengths

Solar Sister utilises a hands-on approach and 'recruits, trains and supports new entrepreneurs, and supplies them with durable, affordable solar-powered products and clean stoves'.¹⁸ They break down barriers by providing tools to women in rural areas that they would not otherwise be able to access due to cultural, geographic and sociopolitical factors. These female microentrepreneurs can then generate income trickle into the development of their communities. Their model evidently creates the opportunity for economic participation, while providing the resources and ability to women, who are traditionally excluded, through a climate-friendly approach. This, however, is not the full extent of the model's reach. Through the provision of clean energy resources, rural communities are then given new opportunities for development, education in understanding the importance of sustainable energy and the creation of new jobs to maintain the new systems. As a result, clean energy becomes much more accessible and affordable and decreases the negative environmental and health impacts of non-renewable energy.¹⁹



Opportunities for enhancing inclusion

While Solar Sister is already connecting rural areas to broader networks and producing autonomous self-developed communities, there are opportunities to further sustain their impact. By creating more partnerships with local and international institutions, Solar Sister has greater ability to receive financial support in diversifying the products they offer. Grassroots organisations can help in reproducing narratives that support clean energy use while private partners can provide greater resources to aid the development of new solar-powered products. The Association for Progressive Communications,²⁰ principally in South Africa, demonstrates the great potential for Solar Sister's model to be extrapolated to create countrywide, even continental, rural communities. Rather than building smaller individual systems, the energy being supplied to the current communities can be expanded to wide-reaching rural areas. The benefits of clean energy can then be reaped across the African continent; doing so could strengthen the ability of rural communities to address the low energy supplies and improve their own well-being amidst the corrupt so-called distributive systems.²¹

2.2 Pillar Two: A level playing field for work and competition

Strengths

The efforts of Solar Sister in promoting female entrepreneurship and solar energy are concurrent with wider efforts in sub-Saharan Africa. For instance, solar and other forms of renewable energy are on the rise in the region, promoted by governments, businesses and the international community.²² Likewise, female entrepreneurship in sub-Saharan Africa is an important focus for governments and intergovernmental organisations in the region, such as the African Development Bank's African Women in Business Initiative.²³

Research indicates that female entrepreneurship reduces wealth disparities within communities, an important mechanism for creating a level playing field. The female entrepreneurs that Solar Sister creates earn a living wage that allows them to meet basic needs. Solar Sister also trains and supports the entrepreneurs they create, providing them with valuable transferable skills.

In doing so, Solar Sister is also supporting similar efforts across the region to eliminate employment barriers in local communities. When women have income, they tend to spend it on the education of their children, clothes, nutritious food and healthcare.²⁴ More importantly, the positive impacts of clean energy have multigenerational benefits. Lack of clean energy locks people into a cycle of poverty and has adverse health impacts.²⁵ By focusing on female entrepreneurship and energy security at the same time, Solar Sister is truly creating a level playing field for work and competition.



Opportunities for enhancing inclusion

Sub-Saharan Africa is a diverse region, one where disparities in income and wealth are staggeringly high and female workforce participation rates are low.²⁶ Several organisations are doing important work in reducing the effects of these; however, cross-border linkages are lacking. To promote alignment with Pillar 2, Solar Sister could partner with organisations around the region working in the domains of renewables or female entrepreneurship, as this may allow scaling up of the programme. Scaling up will allow the programme to reach the remotest of communities and amplify the impact of the work being done.

2.3 Pillar Three: Collective stewardship of shared resources for future generations

Strengths

Solar Sister not only ensures the primary energy demand, but also lessens the effects of climate change via solar technology. This project improves the environmental benefits by leading individuals to switch to clean energy from fossil fuels with the support of solar entrepreneurs who cooperated with Solar Sister. A double-empowerment model allows communities to have access to clean energy, including renewable energy usage in health, education and safety in daily life, and more time, especially for women. Moreover, customers could start new businesses thanks to solar products and save money as they needn't buy kerosene.

Entrepreneurs also benefit from cooperation that holds long-term value in society and the economy, including running businesses in solar energy, improving profits from solar programmes and creating a better social reputation.

Opportunities for enhancing inclusion

Solar Sister could be strengthened by cooperating with governments in investing for future generations in public infrastructure and R&D. For instance, Solar Sister can provide professional support to promote widespread application of clean energy in sustainable public infrastructure with governments in rural areas. Solar Sister could also align long-term R&D efforts to solve more complex challenges via building a knowledge network and sharing practices with shareholders.



2.4 Conclusion

Solar Sister not only ensures the primary energy demand but also lessens the effects of climate change via solar technology. Evidently, this initiative embodies inclusive growth by bringing women into the economy and making them key players in supporting the sustainable development of their communities. The first — and arguably most important — value provided by Solar Sister is economic empowerment of women. They break down barriers of entry by providing the knowledge, skills, financial training and resources needed to be economic participants. Financial independence follows through ownership of resources. Secondly, they address last-mile access to clean energy through solar technology by delivering a diverse portfolio of 'quality-assured clean energy products and services to our women entrepreneurs in last-mile communities'.²⁷ Programmes like Solar Sister are an asset to the sustainable development of sub-Saharan Africa.



4.0

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