Gender dynamics and solar electricity: lessons from Tanzania

Key findings and recommendations
Boost energy impacts by tackling poverty and gender inequality

Our new research on energy and gender shows that solar electricity is improving people’s lives, and has the potential to deliver even bigger change. But it also underlines that solar is no magic potion, transforming communities overnight. In rural Tanzania, as elsewhere, the impact of electricity access is dictated by two huge global challenges – poverty and gender inequality.

This research does bring good news. Hundreds of women recently connected to solar electricity told us their earning power had been boosted, and they now have more flexibility in their lives. But the benefits of solar are still out of reach for the most marginalised, and the arrival of new technology in a home can even risk shifting power from women to men.

Greater progress is possible – if we acknowledge how much poverty and gender inequality still hold women back, and design our efforts to widen energy access accordingly. This report is packed with recommendations for energy enterprises. But policymakers must also take a gender-sensitive approach at every stage of their work, so women can enjoy the full benefits of clean energy. This includes understanding context-specific gender barriers, creating and funding projects that address these, and closely monitoring data on gender impact – using it to guide further work. Crucially, policymakers must do more to share learning with partners such as enterprises, NGOs and fellow governments.

We can address the interlocking issues of energy access, poverty and gender inequality through collaborative action. So it’s time to shake up energy access systems with ambitious, holistic approaches. After all, achieving lasting change is never as simple as flicking a switch.

Harriet Lamb, Ashden CEO
Key findings and recommendations

Our recommendations are for solar enterprises – the front-line outfits bringing electricity to people’s homes. Following these recommendations will empower women, deliver deeper market insights and attract new customers; creating benefits for businesses and communities. Governments, investors and civil society must also take action, through legislation and support for forward-thinking organisations.

Solar enterprises speak to men

Solar enterprises are more likely to interact with men than women at every stage of the customer journey. Male-dominated spaces such as village meetings were popular sites for marketing. Our interviewees had only ever seen male sales agents, and agents were more likely to train men in how to maintain solar systems. This creates a risk that the views and experiences of women are not influencing key decisions.

Entrepreneurs need more support

Popular new ventures for woman solar customers included mobile phone charging and screening TV programmes – half the women interviewed after the arrival of solar were now making money from such businesses. Other women with existing businesses were able to keep working in the hours of darkness. However, concerns about the reliability, capacity and expense of solar had stopped 35% of respondents of both genders from starting new businesses. Lack of flexibility over payments was also a concern for people, particularly during seasons when their income was least reliable.

Solar brings women flexibility – but doesn’t ease the hardest tasks

Solar electricity had brought 90% of woman respondents more flexibility in the time they spent carrying out chores and paid work. But it didn’t make it quicker or easier for women to carry out their most time-consuming activities – such as cooking, cleaning, childcare and collecting water and fuel. Solar did not ease the ‘double burden’ facing women, the pressure to do domestic chores and also earn an income.

Recommendations

Employ women at all levels of the organisation, in order to mainstream women’s needs.

Train women, as well as men, in the use and maintenance of the solar connection.

Target spaces visited by women, such as women’s groups and food markets, for marketing.

Work with ‘woman champions’, existing customers who can promote solar to their community.

Recommendation

Work with clean cooking providers, as well as water pump and other agricultural equipment suppliers, to offer a package of services or products that have a greater impact on women’s lives.
Financial inclusion affects the ownership and use of electricity systems

Solar accounts were owned almost exclusively by men, even though men and women were about as likely to pay the bills. In some cases, this was because men had greater access to mobile money and were more likely to own a mobile phone, particularly compared with poorer women.

Recommendations

Build strong links with local mobile companies to boost women’s phone ownership and access to mobile money.

Connect women with training on the use of mobile money and offer solar customers flexible payment methods to improve inclusivity – such as savings groups.

Electricity access in the home is often unequal

Women and men do not always benefit equally from solar electricity because of how decisions are made within the household. Many women wanted lights positioned in the area they prepared food, but this was not always prioritised. Men sometimes signed up for a system without consulting the wider family first. This risks shifting purchasing power from women to men.

Recommendations

Gender disaggregate company data and work with women customers to understand their aspirations, and the barriers they face to accessing off-grid technology.

Agents often install lightbulbs for families – encourage agents to suggest locations that will benefit women.

Prioritise household visits over on-the-spot individual sales, to encourage more joint buying decisions.

Poorer women see less benefit from the arrival of solar

Women’s wealth had a large impact on the potential for solar to change their lives – for example, better-off women were more able to afford more powerful appliances that created time-saving and income-earning opportunities.

Recommendations

Promote appliances that directly benefit women and offer more appliances on credit.

Carry out regular gender needs assessments to understand the varied needs and aspirations of different women customers, and how they relate to wealth and other factors.

Methodology

Our study involved 1,260 household surveys, 16 focus groups and 66 semi-structured interviews, taking place before and after the arrival of solar electricity (solar home systems and microgrids) in rural villages. Fieldwork took place in 2017 and 2019 in the Kagera and Morogoro regions of Tanzania. The sample was drawn from customers of two solar enterprises and neighbouring communities.

For more information about the research, contact info@ashden.org

Read the full report and detailed methodology at Ashden.org
Thank you

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