



Deep Dive 2: Community Engagment and Social Impact

Rural Energy Access through Social Enterprise and Decentralisation
Project Closing Dissemination Event
Blantyre, April 2024

<https://ease.eee.strath.ac.uk/>

Overview

- Community Engagement and Gender Impacts of Minigrids – *Edson Kathumba, Self Help Africa*
- Monitoring Social Impact of Minigrids – *Aran Eales, University of Strathclyde*
- Community Engagement and Training Energy Hubs experiences – *Memory Suwedi, Community Energy Malawi*
- Questions and discussions

Community Engagement and Gender Impacts of Minigrids

*Edson Kathumba,
Self Help Africa*

Community engagement and Gender mainstreaming in EASE Project



EASE PROJECT DISSEMINATION WORKSHOP

MUBAS-18TH APRIL, 2024

By: Edson Kathumba

Presentation Structure

01

INTRODUCTION

02

COMMUNITY
ENGAGEMENT

03

GENDER
MAINSTREAMING
INTO EASE
PROJECT.

Understanding Community engagement

Key stakeholders engaged: Community members, community leaders, NGOs, government departments.

Significance of community engagement: Local knowledge, ownership and support.



Understanding gender mainstreaming into energy projects

Includes deliberate inclusion of strategies that will promote inclusive energy planning and productive use.

Promotes gender equality and women empowerment.

Gender issues should be integrated into project design, implementation and evaluation

Mainstreaming gender issues into EASE Project

The project needed to better understand the gender-related impacts (both positive and negative)

Engaged the district gender office for guidance and technical assistance

Developed a gender assessment tool

Gaps identified

- Decisions regarding energy planning and use made by men

- Family businesses run by men

- Few women-led businesses – Lack of trust in women to run businesses

- Lack of business and financial management skills

Addressing the identified gaps

Conducted gender equality and PUE awareness trainings



Conducted business management and financial literacy trainings



Rationalised loan groups in favour of women (60% F, 40%M)



Significance of inclusive approaches

Access to energy

- Women
- Marginalized groups

Economic empowerment

- More income generating activities for women

Social benefits

- Health
- Education
- Life style

Pictorial focus on the advantages of gender mainstreaming

**Economic
empowerment for
women**



**Improved service
delivery**



Improved lifestyle



Effective gender integration strategies

Using participatory approaches; Community engagement meetings, focus group discussions and surveys.

Capacity building; Training customers in inclusive household energy planning and productive use.

Enhanced coordination amongst stakeholders; Complementary efforts in solving existing challenges

Key Challenges in integration of gender issues into energy projects

Harmful cultural practices and beliefs; they are promoting gender disparities

Lack of resources and skills by women; this restricts their decision making powers

Lack of established frameworks to guide how gender issues can be integrated into energy projects.

Tools and strategies to promote gender mainstreaming into energy projects

Deliberate inclusion of gender sensitive components in baseline surveys.

Allocating budget lines for gender mainstreaming activities in energy projects.

Inclusion of gender disaggregated data collection and analysis tools.

Lessons learnt

Mainstreaming gender issues into energy projects promotes inclusive household energy planning and productive use.

Inclusive participation in productive use of energy leads to positive social, economical and environmental impacts.

Enhanced collaboration amongst partners and stakeholders facilitates creativity in promoting positive mindset change.

THE END

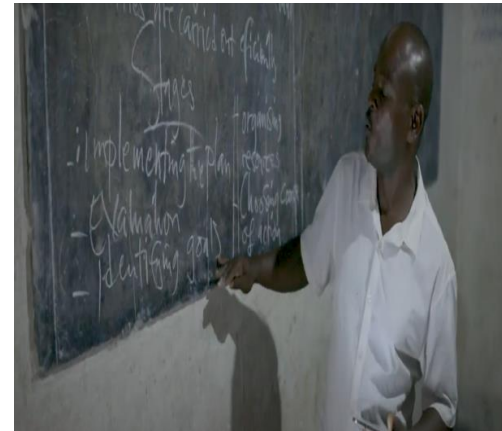
Thank you!

Monitoring Social Impacts of Minigrids

*Aran Eales,
University of Strathclyde*

Why measure social impact?

- Donor requirements – reporting needs numbers
- Technical improvements – user centric design
- Business models – increased revenues from satisfied customers
- Policy advocacy – prove the need for a subsidy



Social Impact of minigrids: Lessons from Academia

- It is easier to evaluate a project's success on economic return on investment rather than social return on the same investment (Iliskog, 2008)
- Common causes of system failure are social: political agenda, stakeholder co-operation, public acceptance & inclusion (Ikejemba et al. , 2017)
- Productive uses of energy highlighted as key to improving the socio-economic conditions of communities. (Kirubi, 2009)
- Strong positive association between democracy and rural electrification (Trotter, 2014)

Electricity access has a positive impact on education, health, employment, and gender equality, but a means of assessing the extent of any social value and impact derived from mini-grid energy provision is missing

Social Impacts of Minigrids: Industry Perspective

Typical evaluation indicators:

- *Technical*: service level, number of connections, demand per connection, type, capacity and capital cost of technology.
- *Financial*: sponsor type, payment method and mechanism, tariff, business model, profitability, financing, payback and perceived risk.
- *Social*: Uptake of PUE, shift away from kerosene, customer satisfaction, disconnection rate, appliance use

“Customers consuming the highest 10% of energy had a five-fold higher Average Revenue Per User than the remaining 90%, and generated 40% of total revenue.”

Vulcan Impact Investing, 2016

“Micro-enterprises benefitted from the mini-grid with 60% of owners reporting improved lighting conditions, increased appliance ownership and ease in business operations.”

Rockefeller Foundation, 2016

Most industry reports are intended as progress reviews to inform future investment in the sector and tend to focus on technical and financial aspects of installations

How to measure social impact?

Surveys

Precise qualitative and quantitative data collected from the community to gain insight on how electricity is being used and the social impact it has on the community

Focus Group Discussions

Qualitative research through gathering people from similar backgrounds or experiences together to discuss a specific topic of interest. Can access more nuanced data

Informal Interviews

e.g. school teacher. Can get deeper insight from one-to-one conversations



 KoBo toolbox

EASE Minigrid Social Impact

- Community training and capacity building a key focus of EASE
- “Customer Journey” enumerator surveys conducted every 6 months

KPI Themes

- Energy Access (SDG7)
- Health, Education and Communication (SDG 3,4,9)
- Employment and Finance (SDG 8)
- Female Empowerment (SDG 10)
- Tariff and Service (SDG 9)



Figure 9: Satisfaction with energy access

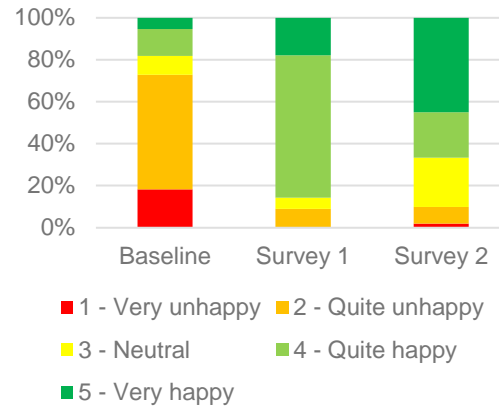


Figure 10: Number of businesses

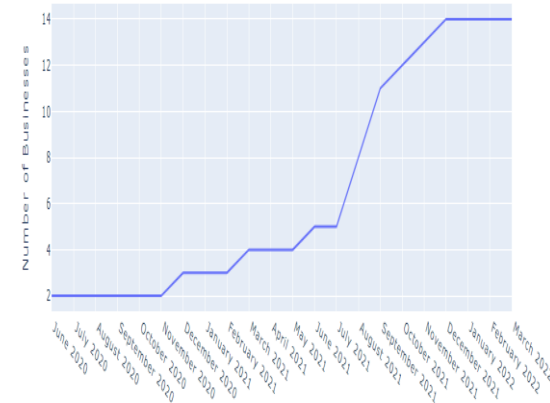


Figure 11: Use of Energy devices

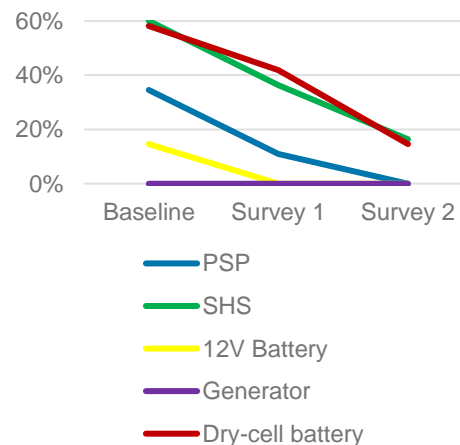
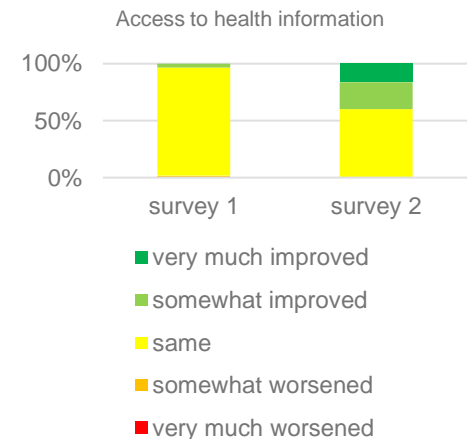
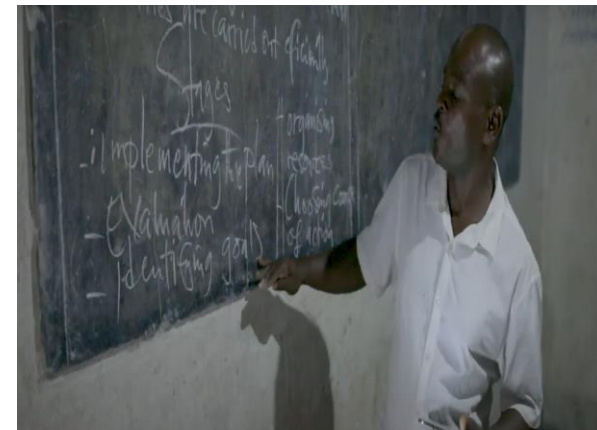


Figure 12: Access to health information



EASE Minigrid Social Impact

- Primary school offers evening classes, children spending additional time studying at home after dark.
- Educational tablets introduced to school (Turing Trust)
- Primary school pupils making it to secondary school increased from 7 to 38
- Access to news and health information has improved
- >20 new businesses started up including:
 - video shows, grocery shops with fridges, computer cafés, cold soft drinks, welding, salons and barbershops
- All businesses reported increase in income, suggesting local economic development
- Positive gender impacts, with women reporting positive impacts on:
 - amount of free time,
 - independence and decision making,
 - respect within the community and household,
 - security in the home



Conclusions

- Social impact of mini-grids is currently rarely measured, with technical and economic factors taking precedent
- Clear drivers and benefits exist for practitioners, academia and policy makers to collect and analyse such data for improved quality of service
- Social impact focussed KPI framework developed and trialled through EASE, positive impact observed in economic development, health, and education.
- This data can be used to inform policy, improve technical design and business models to help scale minigrids in Malawi

Community Engagement and Training CEM EASE experiences

**Memory Suwedi,
Community Energy
Malawi**



University of **Strathclyde** Engineering