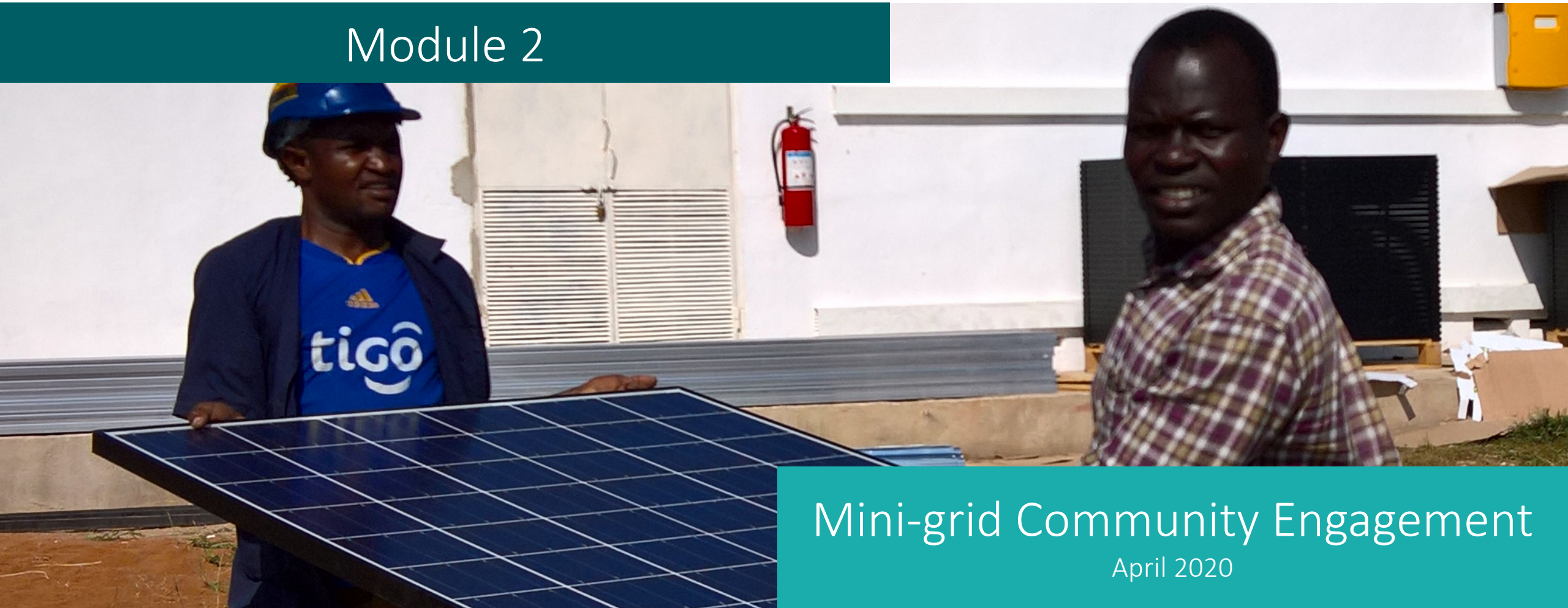


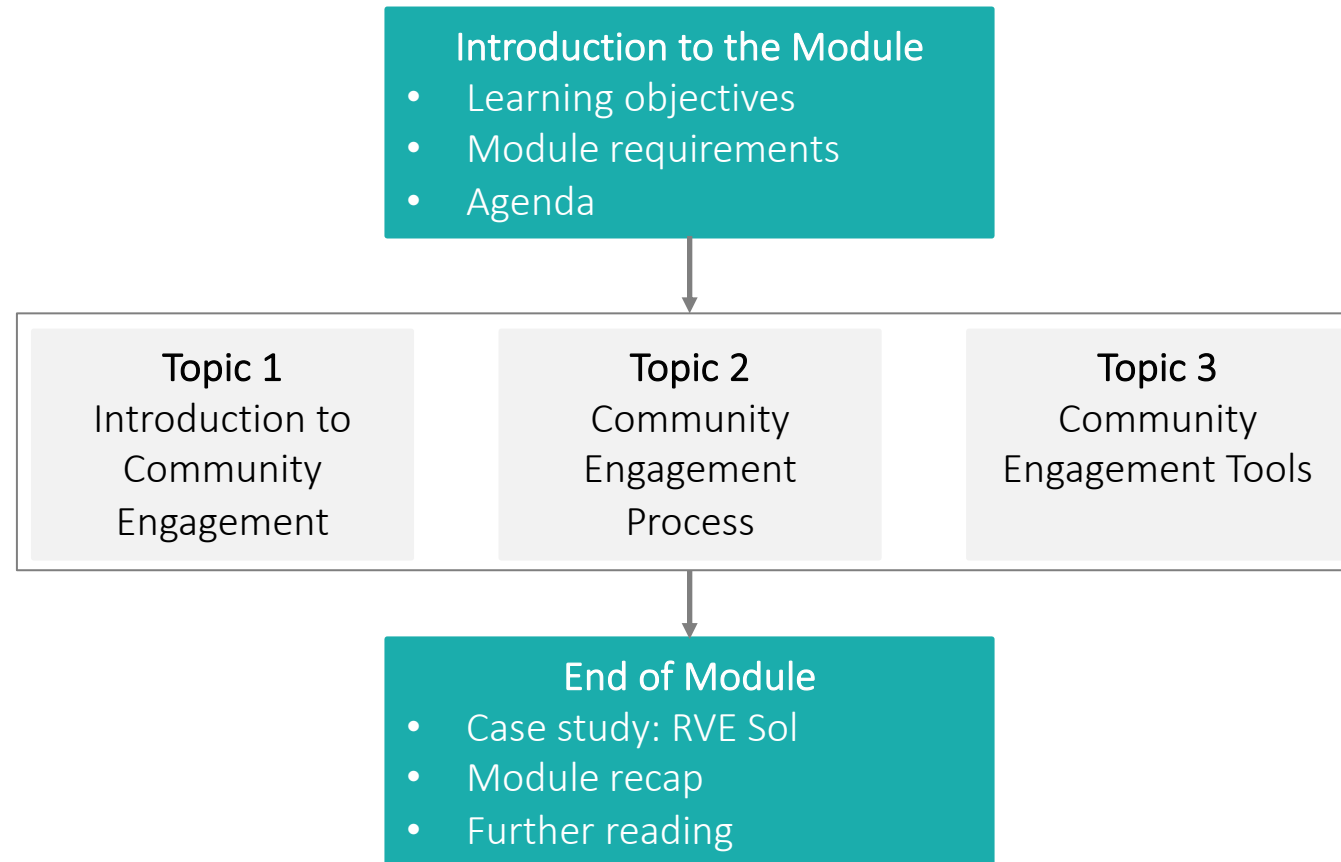
Module 2



Mini-grid Community Engagement

April 2020

Module overview



Objectives & Requirements

Learning Objectives

- Learn about the importance and challenges of community and stakeholder engagement in rural mini-grids.
- Learn how to engage with the communities and the tools available for this purpose.
- Learn how to diagnose and resolve community issues.

Module Requirements

- This module is targeted at mini-grid developers and operators at all stages of development.
- They are expected to have a basic understanding of rural, off-grid energy markets.
- No detailed knowledge of community engagement in a developing country setting is required.

Agenda

1. Introduction to Community Engagement
 - Definition
 - Why do community engagement?
 - Main challenge with community engagement
2. Community Engagement Process
 - Who are the “stakeholders”?
 - Project implementation with community engagement
 - Business, community, and legal considerations
3. Community Engagement Tools
 - Methodologies and activities
 - Customer feedback, mechanisms and methodologies
 - Diagnosing issues with engagement
 - Service level agreements



Definition

“The process of **working collaboratively** with and through **groups of people** affiliated by **geographic proximity, special interest, or similar situations** to **address issues affecting the well-being** of those people.” USDHHS (2011).

In the context of mini-grids, this means:

“The process of **working collaboratively** with **customers and the community** around the mini-grid to **address issues affecting the well-being** of those people.”

Why do community engagement?

- It is a powerful vehicle for **bringing about environmental and behavioural changes** that will **improve the health** of the community and its members.
 - It helps to **mobilize resources** and **influence systems, change relationships** among partners, and serve as catalysts for **changing policies, programs, and practice** – CDC (1997).
- For a mini-grid, this means having a community's needs, and their buy-in, built into the design, installation and operational phases of the site.

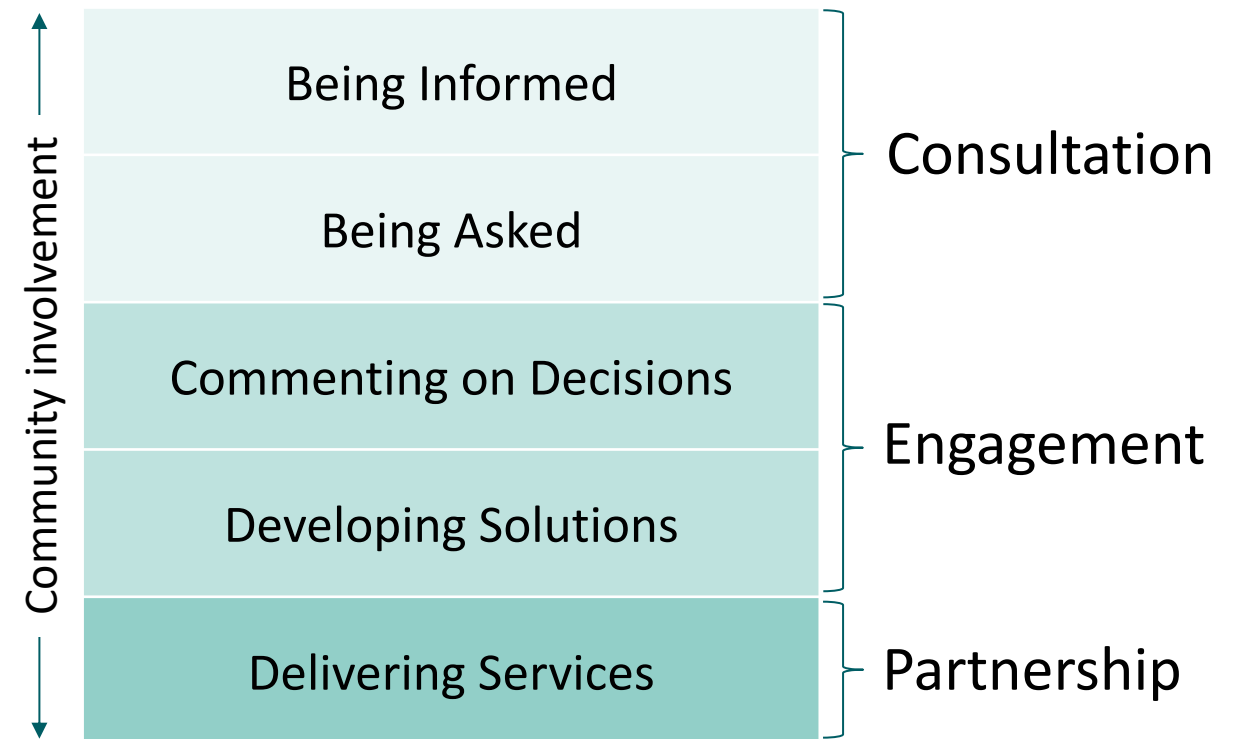


The benefits of doing community engagement.

Adapted from Engage East Midlands (2001). *More information in slide notes.*

Levels of community engagement

- Complex and labour-intensive, but it is **critical to the success of the mini-grid**.
- Even small populations are made up of individuals and groups, each with different circumstances, needs, and aspirations.
- It is an ongoing commitment, not a one-off, time-limited task.
- “Consultation” is not sufficient on its own, the community needs to be involved at all levels.



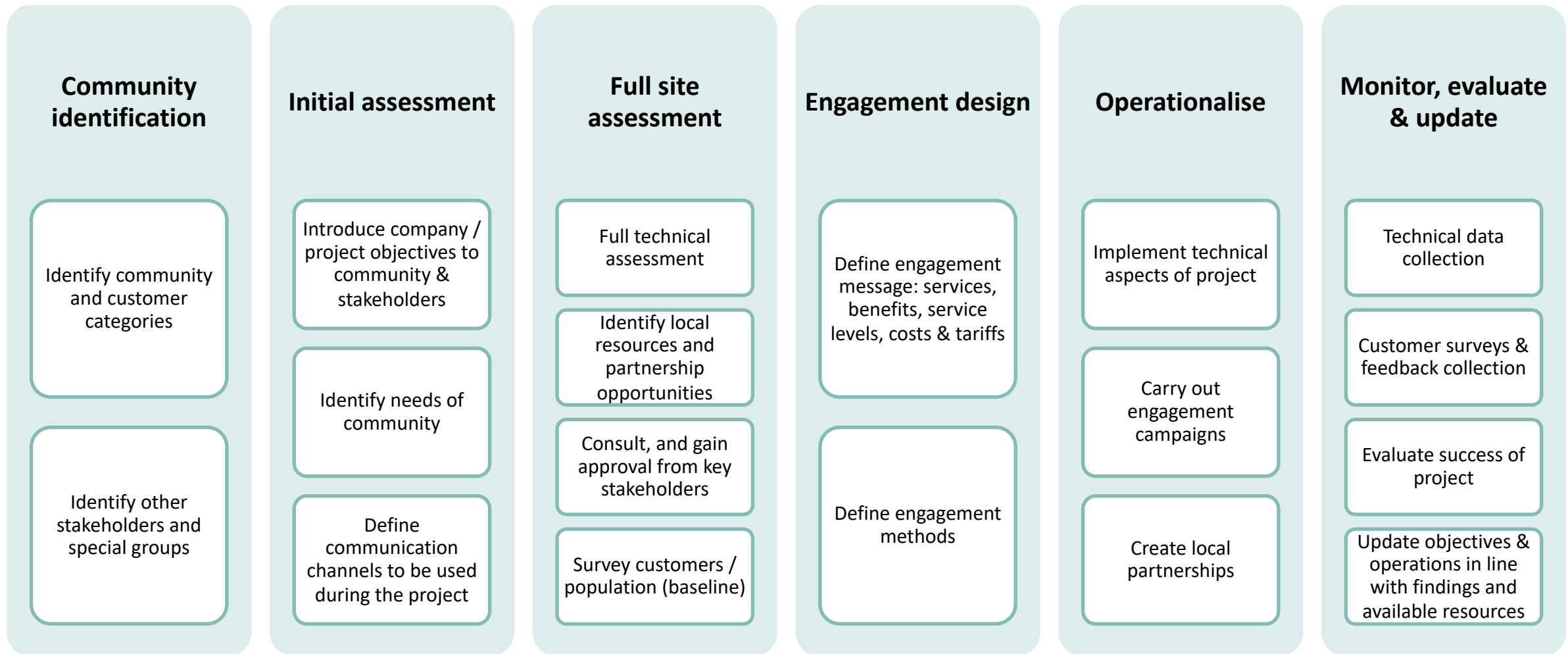
The levels of community engagement: Consultation, Engagement & Partnership.
Source: Engage East Midlands (2001) *Relevant examples in slide notes*.

Who are the “stakeholders”?

Stakeholders are: “people who have an interest in a company's or organization's affairs” – Collins English Dictionary

Type of stakeholder	Role	Interest in the mini-grid
Investors	Contribute to the funding of the mini-grid's development & operation	Return on investment, reputation
Developer	Operate the mini-grid and determine the business model through which to interact with the customers	Building a profitable business, reputation
Customers	Purchase electricity and other services from the mini-grid	Receiving quality electricity / services that positively impact their lives / businesses
Community representative	Disseminate information to the community and receive their feedback	Influence within the community
Local & national regulators	Develop the framework and regulations under which the mini-grid is allowed to operate	Ensuring safe and fair operation of mini-grids in their area of responsibility

Project implementation



Business considerations

- ▶ **Connections:** “Know your Customer”(KYC) for information analysis and customer categorisation (e.g. individual, household, business). Know where are they located. What connection requirements do they have (service levels)? Identify high-priority customers. Define customer agreements and requirements. Attract customers early on.
- ▶ **Product / Service:** What power requirements do the customer groups have? What are their usage patterns? What do they use the power for? What problems of theirs do you need to solve? → Align the product / service to customers’ needs.
- ▶ **Financials:** What are the customers' Ability to Pay and Willingness to Pay (ATP/ WTP)? Adjust marketing materials and campaigns and define a clear communication strategy. Create value through building relationships and anticipate customers’ needs. Tailor the process to enhance usage. What customer incentives are there?
- ▶ **Capacity:** Assess local capacity and capacity gaps around the product / service. How can they be addressed? E.g. through Local Energy Regulatory Committee, Champions, etc. who will be useful to communicate tariff. Design campaigns around needs and gaps identified. Stimulate demand and convert hypothetical demand into real demand.
- ▶ **Security:** Instill community ownership to secure physical assets’ safety and avoid theft of power. Implement health & safety standards for the benefit of the users, as well as the power systems (potential reputational damage in case of injuries and deaths).

Community considerations

- ▶ **Community Representation:** Define groups of civic, political, economic and social groups, as well as special interest groups, e.g. women, youth, agriculture, fishermen, etc.
- ▶ **Identify Needs:** Electricity expenditures should be below current energy expenditure on kerosene, candles, disposable batteries, etc. for similar services (light, phone charging, cooking, etc.). Highlight the wider enabling environment for development and socio-cultural factors. Identify the economic value chains and the gaps.
- ▶ **Participatory Approach:** Ensure collaborative and transparent ways of decision-making and implementation. Potential for joint ownership model, cash or in-kind contributions, and local job creation. Community awareness of power utilisation can be enhanced through a transparent way of information sharing.
- ▶ **Diversification of Village Economy:** Establish new products/ services. Create access to markets. Enhance capacity and skills sets.
- ▶ **Consumer Rights:** Fulfill regulatory obligations concerning rural electrification, tariff setting, health and safety, making connections, as well as operational matters concerning quality and reliability of power, maintenance, etc.

Legal considerations

- Obtain approval of **national authorities** for project and sale of products/ services
- Obtain approval of **local authorities** for community engagement (council, chief, etc.)
- Obtain necessary **licences** to establish the business
- Obtain permits for **land acquisition and leasing**
- Comply to **health and safety** regulations
- **Support potential customers**, particularly (new) businesses, by raising awareness on necessary business permits, tax documents, etc.



Methodologies and activities (1)

There are many activities and engagement methodologies at a developer's disposal. The main ones are summarised here:

Public Meetings:

Provides an opportunity to consult many people and participants can ask questions. Developers demonstrate transparency to the community on the project. Such meetings can be used as launch and / or marketing events. However, often special target groups (e.g. women, youth) do not speak up and would need to be consulted separately.

Workshops and Focus Groups:

Smaller discussion groups allow people to speak more openly. Good for discussing strengths and weaknesses of a specific idea or issue. Experienced facilitators may be required to avoid domination by certain individuals.

Forums:

Regular meetings with community representatives to help maintain commitment and enthusiasm around the project. Can be a platform to address specific local concerns on regular basis. Facilitators need to be careful to keep them action-oriented. Specific energy groups can be created from participants of the forum.

Roundtables:

Tool for consensus building with multi-stakeholder involvement. Participants are treated equally and open discussion is encouraged. Has potential to produce innovative solutions with *win-win* situations.

Methodologies and activities (2)

Village Power Committees (VPC) and Citizens' Juries (CJ) :

VPC: A committee usually made up of elected / senior community members. Acts as a single point of contact for the developer to interface with the community, and an easy channel for the community to provide feedback.

CJ: Like a VPC, however representatives consider complex issues, gather evidence, deliberate it and, crucially, reach a decision. This method is particularly empowering for the community, but the developer needs to be prepared to accept these decisions.

Street Stalls / Demonstrations:

Outdoor displays that capture views and comments of a large audience. Can be used to showcase new products / services (e.g. use of electricity, electrical appliances). Demonstrations of new technologies can attract many people. Video shows can be used to convey messages and content. This method has high potential to generate interest and reach many members of the community. It requires advance planning and budget.

Social Mapping:

Use maps and photographs to illustrate how people view their village, what they like/ dislike and where they want to see improvements. Transect walks can be used to identify local resources available to the village.

Surveys:

Tool to identify needs and preferences of large number of people in a standardised manner. Implementers needs to decide on the sample size, survey collection method (e.g. paper, tablet), survey design (open vs. closed questions) and do follow-up analysis. Increasingly, SMS are used for surveys, though this only allows for very short questionnaires. Surveys deliver quantitative data that can be used for comparisons with other data sets.

Customer feedback & feedback mechanisms

Customer Feedback



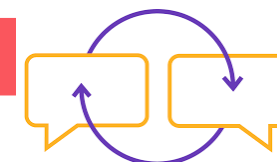
Customer Data

- Important for developers to improve service quality, performance, scale up systems and grow the customer base

Types of Data

- **Qualitative:** customer satisfaction & experience
- **Quantitative:** number of customers, system revenues, power costs, energy sales, time of sales, voltage violations, system downtime

Feedback Mechanism



Data Collection

- Important to capture and respond to customer queries and feedback
- Can be driven by different stakeholders (donor, investor, regulator) and lack standardisation

Methodology

- **Personal:** one-on-one; group discussions on-site vs. **Centralised:** customer call centre
- **Automated:** SMS vs. **Ad-hoc:** surveys
- **Internal systems**

Feedback Loop

- **Gather** (collect feedback from customers)
- **Learn** (analyse the data and draw conclusions)
- **Apply** (apply recommendations)

Feedback methodologies (1)

Methodology	Advantages	Disadvantages	Where to use it
One-to-one interviews (onsite)	<ul style="list-style-type: none"> In-depth understanding from individual customers 	<ul style="list-style-type: none"> Time consuming & expensive 	<ul style="list-style-type: none"> Planning phase of large projects Addressing serious problems, especially those affecting only a few people
Group discussions (onsite)	<ul style="list-style-type: none"> In-depth understanding from cross-section of customers Facilitates discussion between customers and the developer 	<ul style="list-style-type: none"> Time consuming & expensive 	<ul style="list-style-type: none"> Planning phase of large projects Addressing serious problems
Customer call centre (offsite)	<ul style="list-style-type: none"> Customers can be connected to well-trained staff who are offsite Fairly low-cost Call centre can be responsible for many sites 	<ul style="list-style-type: none"> Customers required to have easy access to mobile network Value generated from discussion can be less than if in-person 	<ul style="list-style-type: none"> Ongoing, especially during a stable operational phase of the site

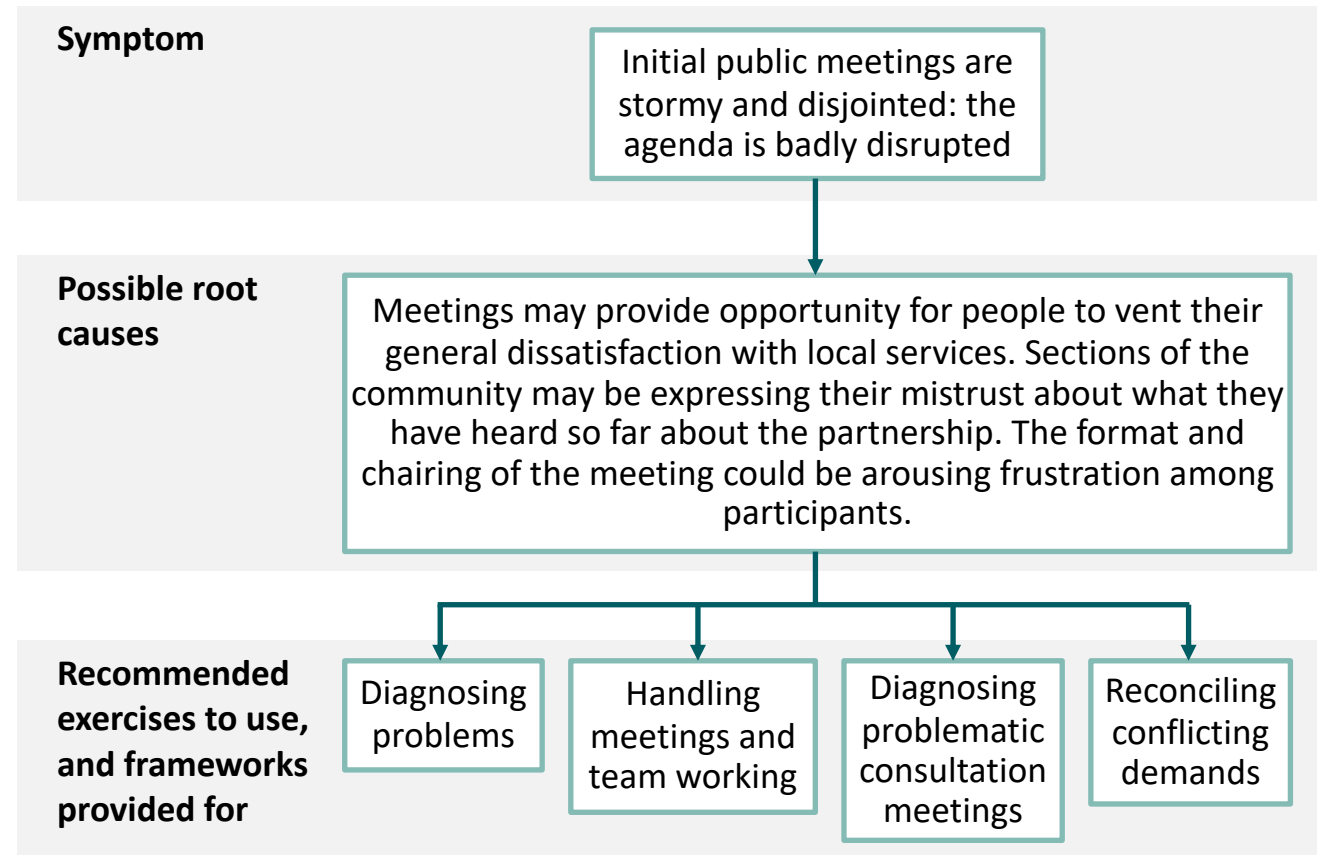
Feedback methodologies (2)

Methodology	Advantages	Disadvantages	Where to use it
Automated (e.g. SMS)	<ul style="list-style-type: none"> • Low-cost • Convenient for customers • Cheaper than onsite methodologies 	<ul style="list-style-type: none"> • Shorter / less information gathered • Risk of lower response rate 	<ul style="list-style-type: none"> • Ongoing • Triggered by certain events (e.g. new connection, after a period of time since connection) • Used to find answers to few but important questions / feedback
Adhoc (e.g. surveys)	<ul style="list-style-type: none"> • A lot of information can be collected • Surveys can be designed in advance to target specific areas 	<ul style="list-style-type: none"> • Time consuming & expensive 	<ul style="list-style-type: none"> • Planning & evaluation phases of major projects / development

Each of these methods have their own strengths and so should all be used (where resources permit).

Diagnosing issues with engagement

- Issues in a developer's relationships with the community & its partners can be very complex
- Once understood, developers have many tools at their disposal to help repair these relationships.
- Engage East Midlands (2001, pages 16-21) has a very in-depth diagnosis matrix that can be applied to many aspects of engagement in most communities.



Example of an issue and how it is worked through in Engage East Midlands (2001, pages 16-21)

Service-Level Agreements (SLAs)

A **service-level agreement (SLA)** is a **contract** between a **service provider** and a **client**. It defines **what services** are to be provided, and **to what standard** the provider is obliged to meet.

Key objectives of SLAs

- Set standards for “good” service
- Manage customer expectations
- Set rules for accountability in level of service provision
- Build customer trust in service provision



SLAs in mini-grids

- The World Bank/ESMAP and the International Energy Agency have developed standardised definitions for different levels of service through a multi-tiered framework. World Bank, et. al. (2016).
- Mini-grid developers should define the service level they will provide to customers, and this should be agreed on with the customer.
- Different customer groups (households & businesses) will require different service levels. Households typically need tier 1 – 3, while businesses require tier 3 – 5.

Service Tier	Tier 0	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Peak Power Available	None	3-50W	50-200W	200-800W	800-2,000W	P >2,000W
Allowable daily energy consumption	None	12-200Wh	200-1,000Wh	1,000-3,400Wh	3,400-8200Wh	>8,200Wh
Duration of Supply	None	> 4hrs	> 4hrs	> 8hrs	> 16hrs	> 23hrs

Case Study – Community Engagement with RVE SOL

Developer: RVE.SOL

Location: Sidonge, Kenya

Generation: Solar PV-battery hybrid

- Community support on productive use:**
- **Site & resources assessment** to help community members formulate productive business cases
 - **Entrepreneurship training** on book-keeping, marketing, customer service, etc. and development of business promotion strategies
 - **Enhanced financial capacity** through establishing a village savings and loans association (VSLA) that has enabled access to over 165 loans over 2 years for its members
 - **Facilitate access to electric appliances** through leasing and financing scheme
 - **Technical training** on appliance operation, including health & safety
- Engagement methods used:**
- **Customer surveys**
 - **Focus group discussions** with community members to identify interested community members and entrepreneurs
 - **One-on-one coaching** with community members
 - **Demonstration of electric appliances** to build interest and capacity



Source: RVE.SOL (2019)

Module recap

- Community and stakeholder engagement is a **continuous, complex and time-consuming process**.
- Consultation is not enough. It requires regular engagement and establishment of partnerships with different stakeholders.
- Community engagement applies across the whole mini-grid project development cycle, from **development to operations**.
- There are **many tools available** to developers for interacting with communities and addressing customer issues and each has its own benefits and specific uses.
- Fostering **community and economic development builds trust with customers** and enhances the mini-grid business case.

Further Reading

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