

Community Engagement



Upscaling Minigrids Development for Low Cost Access to Electricity Services 4th-8th Dec 2017

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Who is Practical Action?



- International NGO
- Founded on belief that technology can play an important role in lifting people out of poverty
- Offices in 8 countries - Africa, Asia and Latin America
- Energy access is a core sectoral focus

Practical Action and Community



Engagement

- For over 50 yrs Practical Action has used technology to empower poor communities to build sustainable, practical solutions to work their own way out of poverty
- Implemented more than 500 mini-grids worldwide, enabled by our market systems approach, and our community-focused model
- provides advice and support on community engagement and fostering growth of productive uses of energy,

Total Energy Access (TEA)



- **Total Energy Access (TEA) approach encompasses:**
- **All spheres of energy access: *households, productive uses and community facilities, differentiated by gender;***
- **All forms of energy access: *electricity, cooking, heating and mechanical power; and***
- **All feasible and appropriate means of energy provision: *grid-connected, mini-grid, and standalone.***

Goal of Community engagement

PRACTICAL ACTION
Technology challenging poverty



- To ensure inclusivity in the design planning and delivery of electricity services
- This includes:
 - Energy needs
 - Tariffs and payment modalities
 - Community ownership and management
- Entails building capacity of mini-grid developers to effectively and efficiently engage with communities and build productive demand,
- Approach works alongside a developer to evolve a community engagement approach which fits with their business model;
- When a mini-grid arrives, communities are often looking to have support from the developer in more areas than just energy.

Benefits for developers

- improve mini-grid design
- increase community buy-in, support and ownership
- mobilise contributions in cash or in kind
- improve billing and revenue collection efficiency
- Aggregation of demand-Creation of electricity buyers' cooperative
- effectively prevent and mitigate conflict
- reduce theft and distribution losses
- actively stimulate demand and increase energy consumption

All of this contributes to improving the operational viability, profitability and therefore scalability of mini-grid business models.

Key Areas of Community Engagement

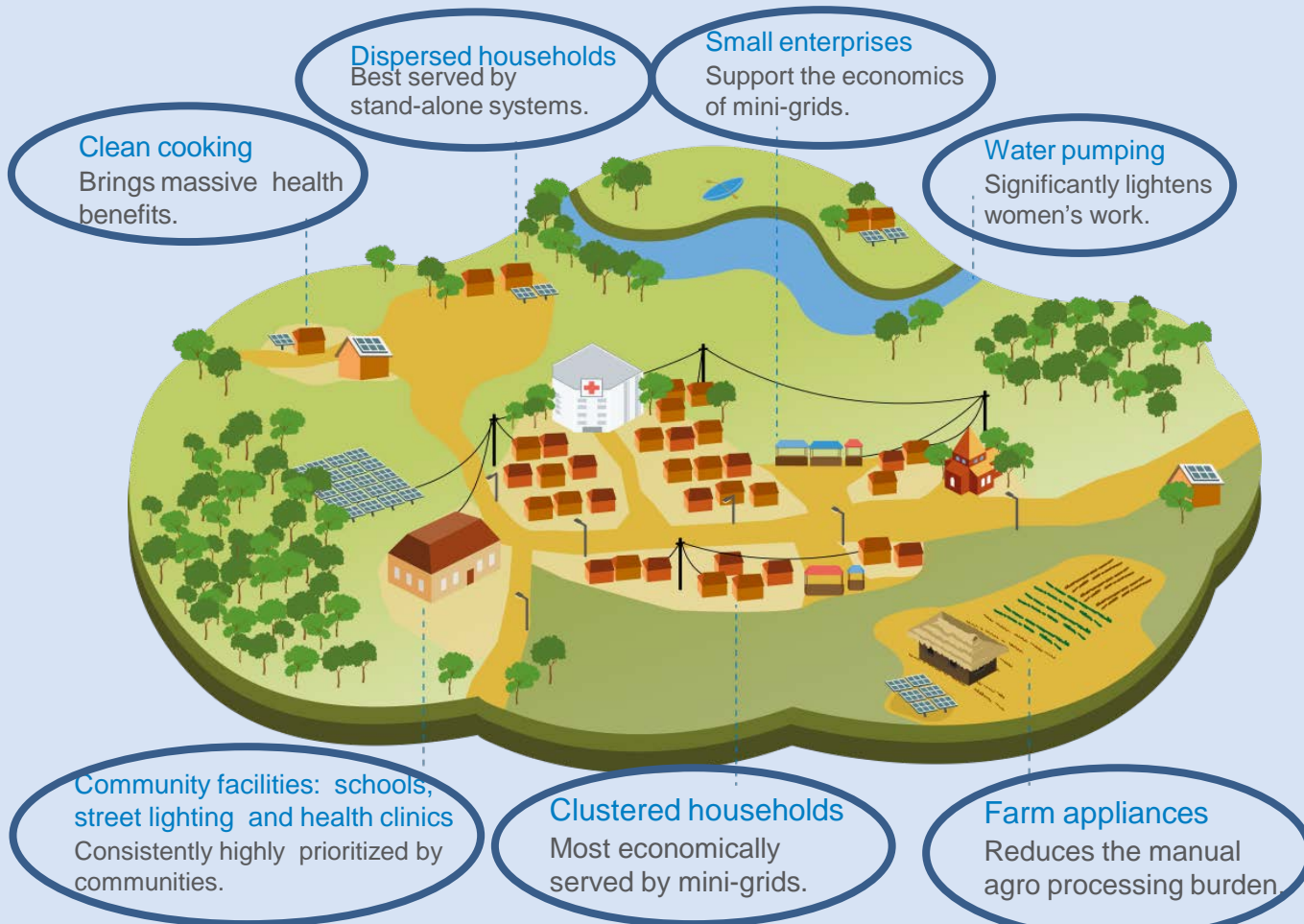
1. Demand forecasting -
current and future demand
-WTP/ATP
2. Technical assessments
3. Business model
development,
4. Development activities for
stimulating energy demand
and strengthening
livelihoods
5. Social Impact monitoring
and evaluation



CE Benefits to end Users

- Contribute to energy literacy in the community
- The technology - how a mini-grid works
- Opportunity for social and economic improvements,
- Limitations, boundaries of the project,
- Tariffs,
- Energy efficient measures
- Potential for Productive uses of Energy,
- Tasks and obligations of the community and,
- Safety or health risks.

Least-cost solutions: integrated rural energy access plans



In all 4 communities, mini-grids sometimes Tier 2 or 3 biomass solutions cheaper for dispersed households, are LPG/bio-ethanol up to 5x more expensive processing and distribution. good awareness mean varying levels of high demand for really existing SME activity. Not a big part of electricity demand, but could grow.



CASE STUDY:



The Kenya Green Minigrid Project



















The Green Mini Grid Facility Kenya avails funds, and supports green and sustainable mini-grid electrification in remote areas in Kenya.

The GMG Facility Kenya provides:

- Technical assistance
- Milestone investment grants
- Output-based grants

Community engagement (social inclusion and gender) is included as part of the due diligence process to ensure those key development aspects are embedded in their projects

Needs and priorities

Priority	Kalokol	Utumoni	Sibinga	Mkwiro	Kakuma	Goudoubo
1 st	 Health centres	 Households	 Households	 Households	 Households	 Street Lighting
2 nd	 Schools	 Schools	 Schools	 Businesses	 Health centres	 Health centres
3 rd	 Street lighting / Households	 Businesses	 Businesses	 Health centres	 Schools	 Schools



Rubagabaga mhp project, Rwanda



- A 300kW project under development by East Africa Power with Practical Action leading on the community engagement
- Pioneering a Private-Public-Community-Partnership model that encompasses development of the grid connected mhp with a component of directly connecting households, businesses and institutions in the village of Rubagabaga.
- An environmental protection component targeting the river's catchment is also factored into the project in order to ensure sustainability

Thank you

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