

Gender and Mini-Grids in Nigeria



RURAL ELECTRIFICATION AGENCY

ENERGY = EMPOWERMENT = EFFICIENCY

“Gender Mainstreaming in the Nigeria Rural Electrification Agency (REA)/ Rural Electrification Fund (REF) Mini-Grid Program”



An NREL Clean Energy Solutions Center “Ask an Expert” Service request.

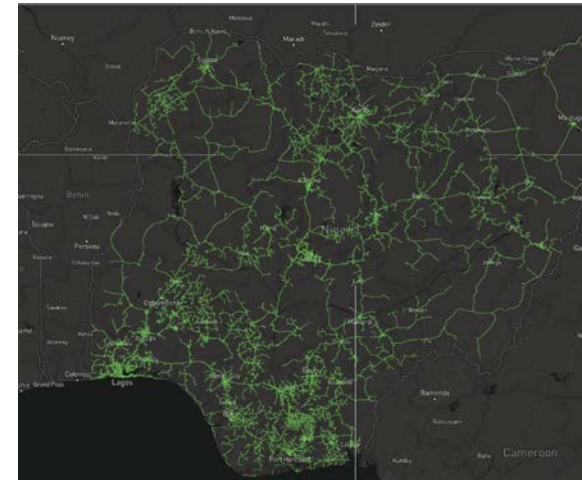
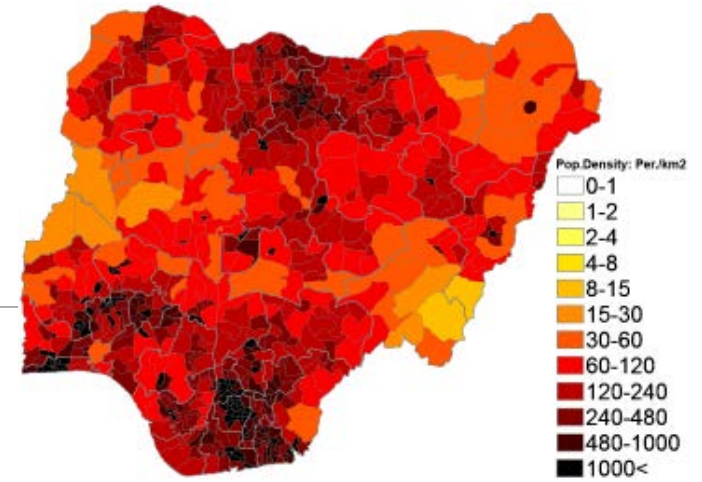


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Background 1/2

- Electrification rate (2017): 45%
 - Urban: 87%
 - Rural: 23%
- Households without power: 20 Million
- Universal access target date: 2030

Data Source: SEforAll Global Tracking Framework Database (World Bank, IEA)



Top: Nigeria Population Density
Bottom: Nigeria Electrical Distribution Network, Facebook Data for Good

Background 2/2

The Nigeria Rural Electrification Agency (**REA**) leads the National Electrification Programme (**NEP**), of which there is a US \$150 Million **Mini-Grid** Component.

The first roughly half dozen mini-grids have been commissioned (2019) and funded through the Rural Electrification Fund (REF), with accelerated roll-out planned for 2020.

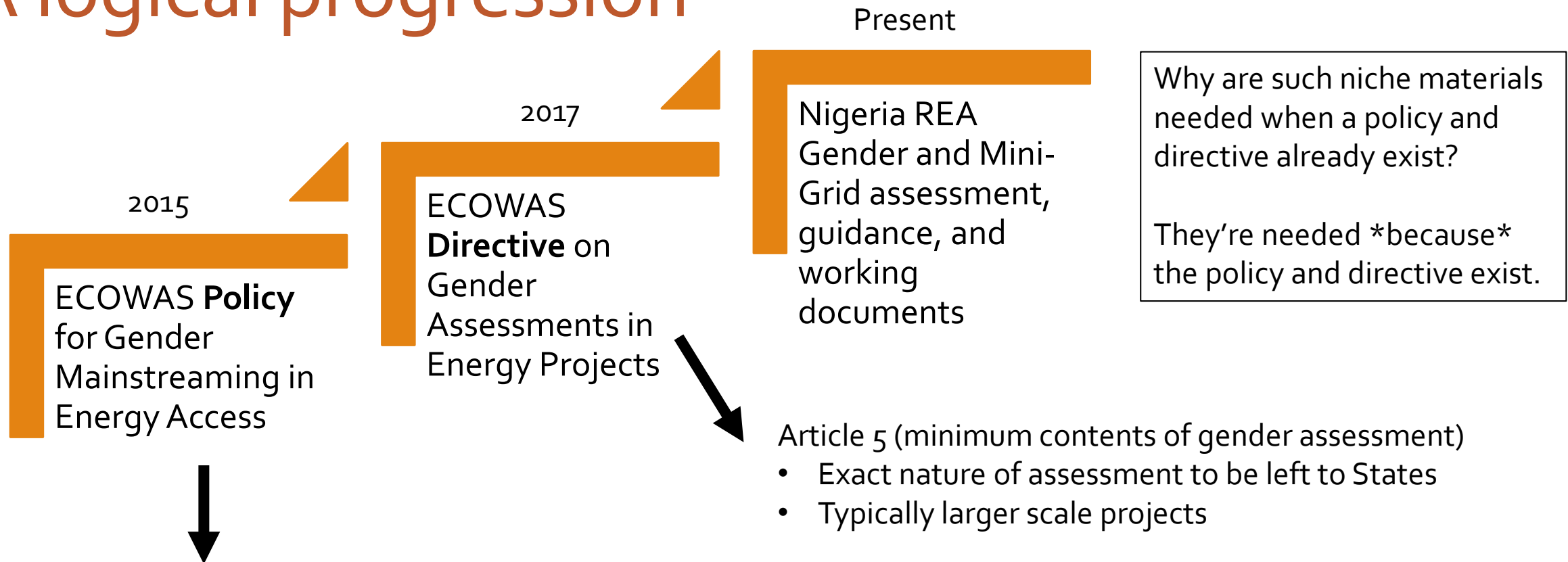


Mini-Grid Project Site: Photos courtesy of REA and GVE Ltd. (Akpabom, Akwa Ibom State, 2019)

An Analogy

1. **Value Chain:** A set of activities carried out by firms that, together, add value to a product and deliver it to customers.
2. Just as there is a **physical value chain for energy**, there is an equally important chain that needs to be built between and among policy, legal frameworks, incentives, enterprises, transactions, monitoring and evaluations.
3. To build this “**policy to practice**” **value chain** it is important to create tools that connect what very often are separate things.

A logical progression



Objective 2 (mainstreaming in energy programs) -> Implementation Plan -> Activities:

- ✓ Develop a gender assessment checklist that agencies can use when elaborating programs
- ✓ Include gender dimension in procurement announcements and terms of references with implementing partners
- ✓ Adopt a gender assessment toolkit for implementing partners

“Ask an Expert” Assignment

OBJECTIVES

1. Aid survey teams in identifying gender-relevant **topics and indicators** for baseline data, screening, and tracking.
2. Suggest small **changes to program working documents** (guidelines, ToRs, RFPs) to promote gender inclusion
3. Develop a **concise guide for mini grid developers** to help them respond to gender considerations in RFPs
4. Provide a summary to REA of work performed and overview **gender strategy**

TACTICS EMPLOYED

1. Review relevant national and regional program and policy **documents**, tying back where possible
2. **Phone interviews** with developers in REA current mini grid portfolio
3. Create **tools** appropriate for each audience
 - Enumerators -> Spreadsheets/data tables
 - Developers -> Concise pamphlet
 - REA -> Inline edits to existing documents
 - Decision-makers -> Executive summary



Mini-Grid Project Site: Photos courtesy of REA and Nayo Tropical Technology Ltd. (Kebbi State, 2019)

Excerpt from Mini-Grid Gender Assessment →

- Developed for REA enumerators
- Conforms to ECOWAS Directive
- Tailored for mini-grid context
- Simplified form available for local developers
- Addition of decision-making/screening tool

	a. General Content to Collect		b. Gender Specific Content to Collect
1.01	Map location and jurisdiction designation(s) of service area		
	1.01 Data: Enter Data Here		
1.02	a. Population of service area	and	b. Age and gender composition of population (male/female, infant/child/working age/elderly)
	1.02a Data: Enter Data Here		1.02b Data: Enter Data Here
1.03	a. Number of households and businesses in service area	and	b. Percentage of female-headed households (relative to total) and female-led businesses (relative to total); number of children in female-headed households
	1.03a Data: Enter Data Here		1.03b Data: Enter Data Here
1.04	a. Local poverty poverty headcount ratio	and	b. Male poverty incidence and female poverty incidence (individual); poverty incidence among male- and female-headed households.
	1.04a Data: Enter Data Here		1.04b Data: Enter Data Here
1.05	a. Primary occupations and economic activity.	and	b. Differentiate between male-dominated and female-dominated activities; number and type of female-led businesses.
	1.05a Data: Enter Data Here		1.05b Data: Enter Data Here

Findings 1/2

1. Scant textual support or rationales for gender mainstreaming/awareness/inclusion found in national level energy policies and legislation...
2. ...But a good percentage of local mini-grid developers already have advanced awareness of gender issues and are trying to be proactive...
3. ...Though scope of possible actions will depend on locale, with significant variation between states.

Findings 2/2

4. Highest impact opportunities are to include women in:
 - a) Employment (temporary, long-term, head office, field)
 - Exploit different work styles
 - Connect with customers/stakeholders
 - b) Demand stimulation (enterprise support, appliance finance, etc.)
 - Average revenue per customer
 - Load balancing
 - Credit risk
5. These are all good for business, but bigger changes could be realized sooner through complementary, long-term partnerships

Thank You

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Photo: PV panels stacked and ready to be mounted next to powerhouse, distribution poles erected. Courtesy of REA and Haven Hill Synergy Ltd. (Oyo State, 2019)