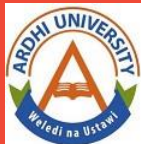


# Socio-economic Impacts of Rural Electrification Through Renewable Mini-grids in Tanzania



Jumeme sample mini grid



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# The Study

## Background

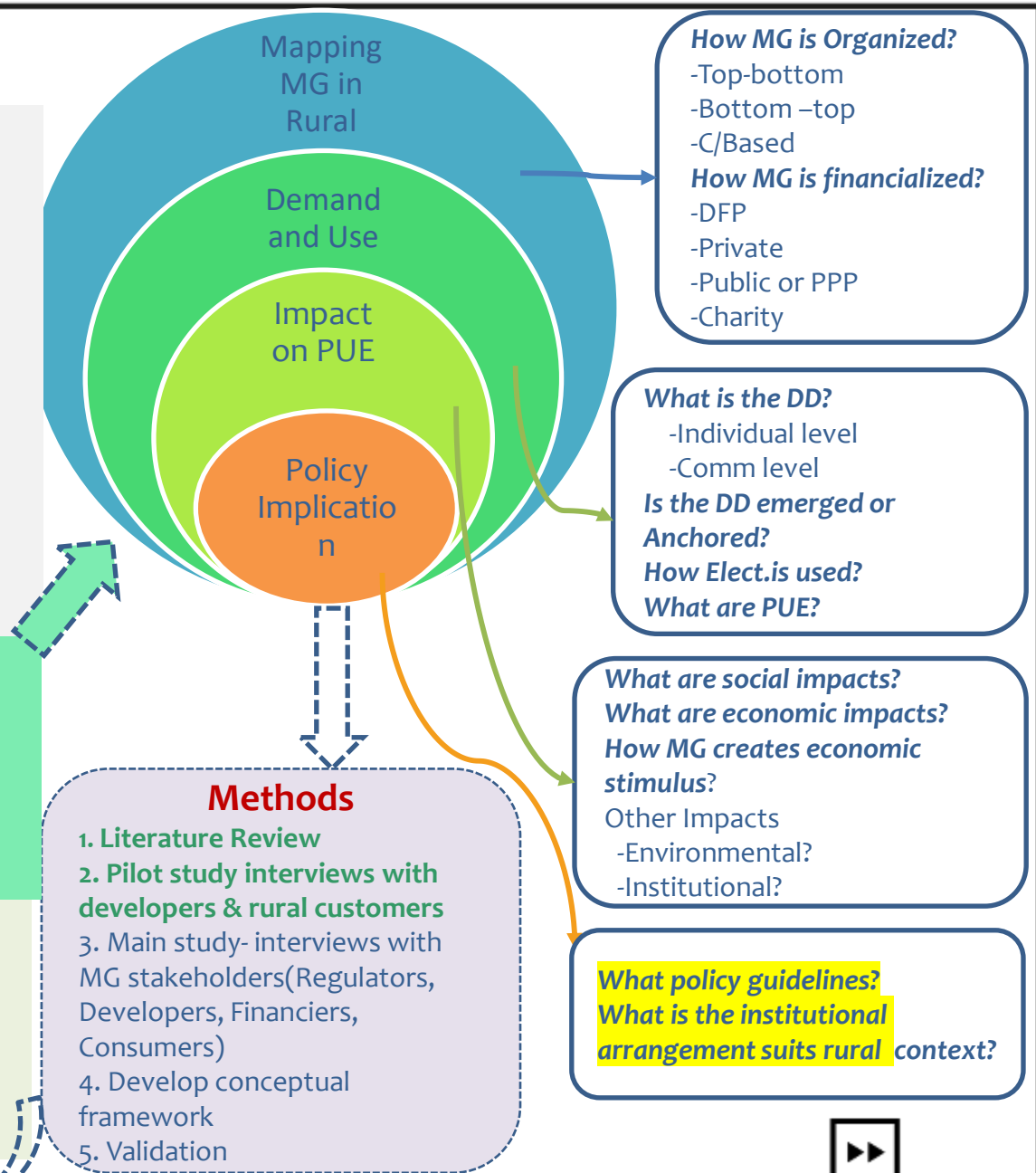
- 600m people world wide have no access to electricity
- 85% Resides in Rural sub-Saharan Africa.
- Mini-grids are expected to electrify about 450 million people in 2040(IEA, 2019b)
- Only 24.5% of Rural H/H in Tanzania are connected to electricity 2019/20.
- *Country focus is 75% rural electrification by 2033.*

## Aim:

Explore MGE in the context of rural communities focusing on how it has impacted on the PU and livelihoods improvement.

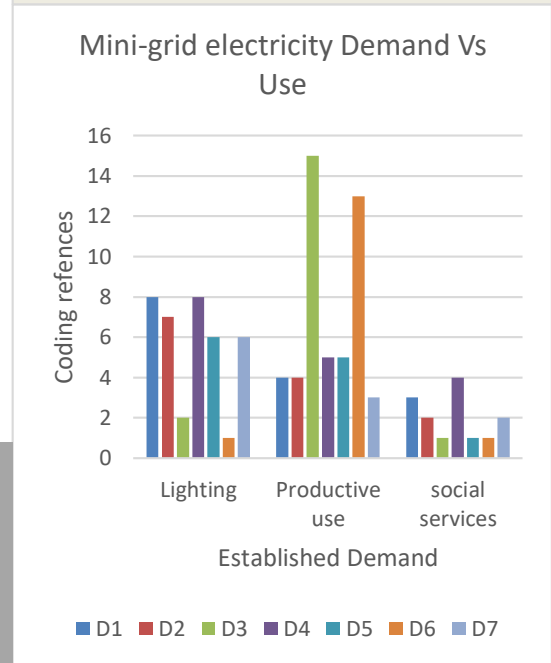
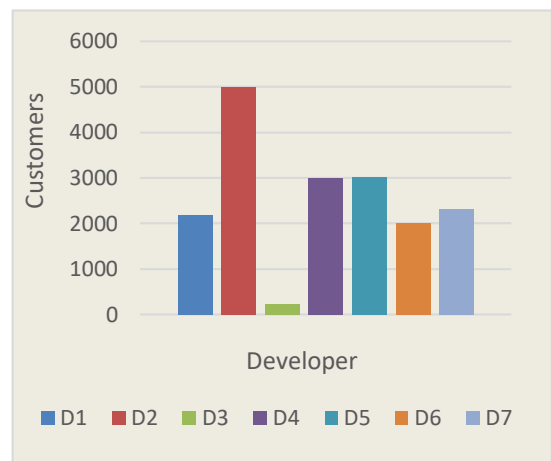
## Literatures Findings

- Gap between renewable MG, PU and Rural potential value chain.
- The Electrification **push** results in to **consumptive use**



# Initial Pilot Results

- Mini-grid type - *hybrid solar* (PV, Genset & Battery).
- Mini-grid design - **customer's demand assessment**
  - *Primary customers*: Household (70%-80%); *Secondary customers*: Productive users (20%)
- **Social activities**: Churches, Schools, Mosques, Dispensaries.
- **Economic activities**: Milling, Welding, Music shops, Video/cinema shows, Mini shops, Barber shops, Tailoring mat, Phone charging, Restaurants and Bars, Animal keeping and Dairies.
- **Financial issues**:
  - *Affordability – Appliance and electricity itself*
- **Political issues**: New Tariff directives has **-ve** impact on supply & reliability of electricity to users.



To what extent MG electricity has impacted on the PUE & livelihoods improvement?.

How to enhance MG electrification value chain in rural area?

What MGE framework may stimulate rural economy?





# Thank You

## Consumptive use



*Household Connection*



*Church*

## Emerging Productive use



*Tailor Mat*



*Hardware*



*Lodge/guest house*