Entrepreneurs, Enterprises and Energy in Africa

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Persistent poverty in Africa

Source: PovcalNet, World Bank.
Energy - Poverty Link


Source: IEA; UNDP analysis
Access: REED approach (I)

Entrepreneurs

enterprise development Services (EDS)

start-up + 2\textsuperscript{nd} stage financing

intermediaries:
national/international NGOs

Clients:
Rural and/or peri-urban

Energy Services

short-term: in-house Investment Facility
long-term: \textbf{financial institutions}
Access: REED approach (II)

Combine ‘traditional’ REED Support

End User Finance

Clients: Primarily rural commercial customers of energy enterprises

Key Players: MFIs and regular FIs

Entrepreneurs

Energy Services

enterprise development services

start-up financing
### REED portfolio structure

#### Type 1 REED Investment: *Proof of Concept*
- e.g., Jatropha, crop drying, solar grinders.
- Very low risk-adjusted returns.
- High innovation impact on sector dev.
- Typical Loan Size: $25,000
- Ave defaults: 30%
- Ave returns: <3%

#### Type 2 REED Investment: *Commercialization*
- e.g., Waste to energy, rural LPG
- Low risk-adjusted returns
- Ave Loan Size: $70,000
- Ave defaults: 15%
- Ave returns: 3%-5%

#### Type 3 REED Investment: *Expansion*
- e.g., Urban LPG, efficient lighting
- Moderate risk-adjusted returns
- High direct impacts
- Low Innovation impact
- Ave Loan Size: $130,000
- Ave defaults: 10%
- Ave returns: 5% - 8%

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**AREED Investments 2000 - 2006**

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Size (US$)</th>
<th>Type 1 Investment</th>
<th>Type 2 Investment</th>
<th>Type 3 Investment</th>
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### Case study: Toyola Energy

- **Core Business:** Production and distribution of energy efficient biomass cook-stoves and rural solar products

<table>
<thead>
<tr>
<th>Owner/Managers: Suraj Wahab and Ernest Kyei</th>
<th>Financial assistance by KITE under Africa Rural Energy Enterprise Development (AREED) project in 2006</th>
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<td>1 of the 78 informal sector artisans trained by EnterpriseWorks to produce energy efficient stoves under the Ghana Household Energy Project in 2003</td>
<td>Increased sales from 3000 to over 15,000 units per annum</td>
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<td>To date, they have provided over 50,000 households in 6 regions of Ghana with improved/energy efficient stoves.</td>
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Utilization of AREED Reflows: Proposed Funding Mechanism under AREED+

- **Loss Reserve Fund (BRS)**
  - Wholesale loans
  - Wholesale loan guarantee

- **Wholesale Lender**
  - Fondation Sen’Finance

- **AREED+ Secretariat**
  - (Mobilization + coordination of technical support services targeting entrepreneurs, Sen’Finance and MFIs: • EDS • Clean technology risk analyses (for banks) • Green energy resource assessments (for entrepreneurs and banks))

- **National Microfinance Institutions (5 countries)**
  - Supply side (Operating Loans)
  - Demand side (Consumer Financing)

- **Clean Energy Markets (Productive + Domestic Users)**
  - Clean energy products and services

- **URC**
  - Donor fund raising support as needed

- **Start-up loan facility: entrepreneurs**
Lessons

- The poor can afford improved energy end-use equipment if:
  - They are aware of the availability of the technology and practical benefits to their life
  - They are given the necessary financial assistance to enable them pay in installments

- Diversifying target group to include commercial/institutional and domestic markets is appropriate for sustainable business

- The entrepreneurial led model to improved cookstove dissemination is sustainable as donor driven projects ends when funding dries up
Thank you

Contact