Results Based Financing for pico-solar market development in Tanzania

4th International Off-Grid Lighting Conference and Exhibition, Dubai
Martijn Veen, SNV
EnDev Tanzania Programme
SNV: RBF for Pico-Solar in Tanzania’s Lake Zone

RBF Basic Characteristics & Principles

Shift in Practice & Thinking

• Up-front subsidies $\rightarrow$ Conditional post-incentives
  • Non-delivery $=$ Non-payment

• Risk from donors $\rightarrow$ Market actors

• Barriers $\rightarrow$ Opportunity

Temporary Incentive to Trigger Growth

• Responsive design to unique market context

• Flexibility for private sector to drive business modelling
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Rationale & Design

Domestic Energy Technology Preference Breakdown

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Like</th>
<th>Dislike</th>
<th>Want</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Stone</td>
<td>14%</td>
<td>42%</td>
<td>10%</td>
</tr>
<tr>
<td>Metal Stove</td>
<td>15%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Oil Lamp</td>
<td>8%</td>
<td>18%</td>
<td>1%</td>
</tr>
<tr>
<td>LPG</td>
<td>8%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Electric Grid</td>
<td>19%</td>
<td>9%</td>
<td>21%</td>
</tr>
<tr>
<td>Gas Gen.</td>
<td>0%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td>ICS</td>
<td>27%</td>
<td>1%</td>
<td>18%</td>
</tr>
<tr>
<td>Biogas</td>
<td>6%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Solar</td>
<td>23%</td>
<td>7%</td>
<td>35%</td>
</tr>
</tbody>
</table>
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Rationale & Design

Quality assurance: All products are Lighting Global approved
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Rationale & Design

Creation of a *Temporary Financial Product* within mainstream banking
- Accessible only to legitimate pico-solar import-suppliers
- Applicable only for rural distribution chain development in the Lake Zone

RBF Facility
Total of **€1 million** in competitive private sector incentives available
- Hosted by *Tanzania Investment Bank (TIB)* as the RBF Fund
- Incentives are *earned* on each verified unit sale to rural customers
  - Incentive value per unit is based on energy service (*lumen-hours per solar day charge*)
  - Decrease in value by 25% per annum
- Incentives are *paid* to suppliers as 2 equal instalments of:
  i. Product Bonus to Retailers
  ii. Capital Bonus to Import-Suppliers
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Rationale & Design

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RBF Round 1 - First Eligible Sales May 2014

<table>
<thead>
<tr>
<th>No.</th>
<th>Supplier</th>
<th>Location (Head Office)</th>
<th>Pico-Solar Products</th>
<th>Business Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EnSol</td>
<td>Dar es Salaam</td>
<td>Omnivoltaic</td>
<td>MFI Agents</td>
</tr>
<tr>
<td>2</td>
<td>Global Cycle Solutions</td>
<td>Arusha</td>
<td>Greenlight Planet</td>
<td>Village Agents</td>
</tr>
<tr>
<td>3</td>
<td>Off Grid Electric</td>
<td>Arusha</td>
<td>Fosera</td>
<td>PAYGo Utility</td>
</tr>
<tr>
<td>4</td>
<td>Sunny Money</td>
<td>Dar es Salaam</td>
<td>d.Light, Greenlight Planet</td>
<td>Institutional-Village Agents</td>
</tr>
<tr>
<td>5</td>
<td>Zara Solar</td>
<td>Mwanza</td>
<td>Omnivoltaic</td>
<td>Traditional Retail</td>
</tr>
</tbody>
</table>

Results so far (Mid-Year 2015):
- 3 solar companies opened offices in the Lake Zone as a result of the RBF
- 16 types of Lighting Global approved solar products being sold
- New jobs: 212 retailer and 118 solar company staff
- 23,000 persons with access to clean energy services (*est.* +45,000 by Dec.15)
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SNV: RBF for Pico-Solar in Tanzania’s Lake Zone - Sales
Sales: May 2014 – November 2015
**EnDev Tanzania Programme**  
**SNV: RBF for Pico-Solar in Tanzania’s Lake Zone**  

**RBF Round 2 - First Eligible Sales May 2015**

<table>
<thead>
<tr>
<th>No.</th>
<th>Supplier</th>
<th>Location (Head Office)</th>
<th>Pico-Solar Products</th>
<th>Business Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lotus Africa</td>
<td>Dar es Salaam</td>
<td>Azuri</td>
<td>PAYGo via Telecom</td>
</tr>
<tr>
<td>2</td>
<td>Mobisol</td>
<td>Arusha</td>
<td>Mobisol</td>
<td>PAYGo as MFI</td>
</tr>
<tr>
<td>3</td>
<td>Ongeza</td>
<td>Arusha</td>
<td>d.Light, Greenlight Planet, Fosera</td>
<td>Rural Commissioned Agents-Franchisees</td>
</tr>
<tr>
<td>4</td>
<td>SimuSolar</td>
<td>Musoma</td>
<td>Omnivoltaic</td>
<td>PAYGo - Rural Agents</td>
</tr>
<tr>
<td>5</td>
<td>Sollatek-Power Control</td>
<td>Dar es Salaam</td>
<td>Niwa</td>
<td>Agro-Cooperatives</td>
</tr>
</tbody>
</table>

**Way forward for RBF Year 2 (2015-2016)**

- Broader inclusion of Pay-As-You-Go (PAYGo) models: 4 out of 10 companies
- Product roster expansion with proof Lighting Global cooperation
- Introduction of mobile based applications in verification
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**SNV: RBF for Pico-Solar in Tanzania’s Lake Zone**

#### RBF Lessons Learned: Opportunities, Risks, Realities

<table>
<thead>
<tr>
<th>Advantage - Opportunity</th>
<th>Disadvantage – Risk</th>
<th>Matters arising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberates the private sector</td>
<td>Transaction is not mandatory</td>
<td><strong>Private sector buy-in &amp; contribution at all stages is a must</strong></td>
</tr>
<tr>
<td>Limited costs if no transaction</td>
<td>No control of implementation speed or success (financier)</td>
<td><strong>Quality &amp; response time critical for company confidence (and cash flow)</strong></td>
</tr>
<tr>
<td>Exit-graduation from classically based programming</td>
<td>Limited possibility to support TA shortfalls in private/financial sector</td>
<td><strong>Risk of monopoly / oligopoly creation</strong></td>
</tr>
<tr>
<td>Provides means for private sector scaling through mainstream banking</td>
<td>Leverage can be challenging as RBF is foreign to traditional finance</td>
<td></td>
</tr>
</tbody>
</table>

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RBF Lessons Learned: Conclusions and Recommendations

• **Success factors for RBF:**
  - Private sector capacity and market maturity
  - Strong and willing financial sector to host a RBF incentive fund
  - Market-based approach: Get the right incentive in the right place
  - Enabling environment: favorable business climate, policies, pre-finance, etc.

• **Facilitate private sector engagement** by maintaining transparent, enforceable and answerable frameworks (clear valuations, guidelines & procedures)
  - Discard project logic -> Focus on business proposition
  - Build on existing systems & tools

• **Quality assurance** of products / service to customers (IFC Lighting Global approved) contributing to sustainability

• **RBF is only a complementary instrument**, catalysing market development if certain pre-conditions are given
Thank you for your attention!

Funded by:

[Logos and names of funding partners]

Implemented by:

[Logos and names of implementing partners]

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