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Renewable Energy Policies for Climate resilience, Sustainable Development and Poverty Reduction

Case study : Access to Improved Oven for fish smoking & Women entrepreneurship in Senegal
KEY QUESTIONS

• How access to efficient energy equipment can enhance women’s resilience to climate change?
• How to strengthen the economic power of women through a micro-finance scheme that promotes access to clean energy equipments?
• How to influence policy using proven approaches?
Context

• Women are involved in income generation and job creation mainly through the processing of agricultural and marine products.

• The technologies used by Senegalese women for fish smoking present a number of limitations.
Limitations of Traditional Ovens

- Weak production capacity of the traditional methods that limit scaling up opportunities

- air pollution for women and girls;
- mangrove ecosystem degradation

- high costs of biomass fuel, 75 CFA/kg)
Fish Smoking Ovens
Characteristics of the Equipment

- Capacity : 500 Kg/H
- Cost : 500 Euros
- Energy saving : 30 %
- High quality of product
## Comparative Analysis

<table>
<thead>
<tr>
<th></th>
<th>2m32 Oven</th>
<th>Traditional Oven</th>
<th>Improved oven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Cost (FCFA)</td>
<td>150 000</td>
<td>326 000</td>
<td></td>
</tr>
<tr>
<td>Capacity (Kg)</td>
<td>250</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Life span</td>
<td>1 – 3 years</td>
<td>+10 years</td>
<td></td>
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<tr>
<td>Wood consumption / cooking (Kg)</td>
<td>15</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Cooking time</td>
<td>1 h – 1h 30</td>
<td>30 - 45 mn</td>
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PROGRAMME OBJECTIVES

- to distribute improved ovens with high performance and high quality of products
- Strengthen women’s economic power in rural area / dignity
- Contribute to the reduction of biomass consumption
- Equity relating to access to energy services for productive use
Funding Mechanism under AREED+

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

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

**ENDA**
(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)

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

**Local Microfinance Institutions**
- Supply side (Lending)
- Clean energy products and services

**Entrepreneurs (initially 5 countries)**
- (Vendors/Producers)

**Demand side (Consumer Financing)**
- Start-up loan facility: entrepreneurs

**Clean Energy Markets (Productive + Domestic Users)**
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RESULTS

- Technical factsheets
- Training of associations in management
- Exchange of experience among involved actors
- Micro-financing of equipment users (demand side financing)
- 467 women through 12 women cooperatives active in fish processing
Market opportunities

• Women and women associations
• 2000 clients from the region where the project is implemented
• Target group: 50% in 3 Years
• The demand of smoked fish increases daily (Senegal, Ghana, Nigeria, Burkina, Guinea)
• The evaluation of this pilot activity shows a huge interest from target groups
• Need assessment will be done in other regions as well as other countries in order to get figure for the global market)
Market opportunities (2)

- Comparative advantage / Competition
  - Performance of the equipment and quality of the product
  - Financial mechanism to facilitate access to the equipment
THANK YOU FOR YOUR ATTENTION

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