OFDA/USAID Mitigating Disaster Projects in 5 Provinces of Mozambique:

Preliminary Results of the Baseline and Endline Surveys

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The Problem

- Severe drought in South and Central in 2010
- Loss of 32% planted area

- Next year some of those areas were hit by floods
The Two Years Emergency Mitigating Effort

- At the request of the Government of Mozambique
- Developed a response strategy

1. disseminating new OFSP varieties (DVM vs. massive distribution)
   1. help recovery while improving vitamin A intake
   2. implementation with strong collaboration of extension personnel

- Target 120,000 households
  1. 75% with a child <5 yrs of age
  2. Other vulnerable members (elderly, HIV affected etc.)
What Have We Achieved so Far?

- 80% of them with at least 1 child under 5 years of age

<table>
<thead>
<tr>
<th>Province</th>
<th>Total Households Reached</th>
<th>Male</th>
<th>Female</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Province</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maputo</td>
<td>26249</td>
<td>8787</td>
<td>17462</td>
<td>66.52</td>
</tr>
<tr>
<td>Gaza</td>
<td>17488</td>
<td>5276</td>
<td>12212</td>
<td>69.83</td>
</tr>
<tr>
<td>Inhambane</td>
<td>14931</td>
<td>5363</td>
<td>9568</td>
<td>64.08</td>
</tr>
<tr>
<td>Manica</td>
<td>46875</td>
<td>27301</td>
<td>19574</td>
<td>41.76</td>
</tr>
<tr>
<td>Sofala</td>
<td>26903</td>
<td>12186</td>
<td>14717</td>
<td>54.70</td>
</tr>
<tr>
<td>Zambezia</td>
<td>2015</td>
<td>1215</td>
<td>800</td>
<td>39.70</td>
</tr>
<tr>
<td><strong>Total HH</strong></td>
<td><strong>134461</strong></td>
<td>60128</td>
<td>74333</td>
<td>55.28</td>
</tr>
</tbody>
</table>
What Have We Achieved so Far?

- More than 320 DVM established
- Several field days organized
- About 600 people trained for one day agro-processing
- About 300 extension agents trained
- Key messages concerning nutrition disseminated (TV, radio, newspaper, signboards etc.)
Findings from the Baseline vs. Endline Surveys

The Study Area and Research Method

• Baseline conducted in 18 districts (35%) out of 52
  1. based on geographic location (North, Central, South)
  2. higher nr of vulnerable households

• 431 households visited, being 24 per district
  1. Per district, 12 from potential areas covered by DVM, and 12 massive distribution
  2. Household with at least 1 child < 5 years of age

• Respondents randomly/systematically selected from a list

• End-line conducted in 11 districts covering 329 HH, 30 HH per district

• Data were collected using structured questionnaires
Gender of HH Head

Baseline (N=431)

- Male: 75.20%
- Female: 24.80%

End-line (N=329)

- Male: 77.70%
- Female: 22.80%
Household Demographics

**Average Age (Head of HH)**
- **Baseline (387):** 42.5
- **Endline (280):** 47.7

**Average Level of Education (HH Head)**
- **Baseline (362):** 4.4
- **Endline (313):** 3.9

**Percentage of Female Respondents**
- **Baseline (431):** 53.5
- **Endline (329):** 58.9
Crop Production

- OFSP: Endline 71.5% (n=329), Baseline 28.7% (n=431)
- Vegetables: Endline 71.5% (n=329), Baseline 28.7% (n=431)
- Banana: Endline 90.2% (n=329), Baseline 90.2% (n=431)
- Groundnut: Endline 90.2% (n=329), Baseline 90.2% (n=431)
- Beans: Endline 71.5% (n=329), Baseline 71.5% (n=431)
- Sweetpotato: Endline 96.1% (n=329), Baseline 96.1% (n=431)
- Cassava: Endline 96.1% (n=329), Baseline 96.1% (n=431)
- Sorghum: Endline 90.2% (n=329), Baseline 90.2% (n=431)
- Rice: Endline 90.2% (n=329), Baseline 90.2% (n=431)
- Maize: Endline 96.1% (n=329), Baseline 96.1% (n=431)

Y-axis: % of respondents
X-axis: Crop Production
Households Growing WFSP vs. OFSP

Proportion of households growing WFSP and OFSP (Beginning vs. End of the Project)

<table>
<thead>
<tr>
<th></th>
<th>Baseline (n=431)</th>
<th>Endline (n=329)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Respondes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFSP</td>
<td>85.6</td>
<td>69.6</td>
</tr>
<tr>
<td>OFSP</td>
<td>35.3</td>
<td>76.0</td>
</tr>
</tbody>
</table>
Area with WFSP vs. OFSP

**Average Area (m²) with WFSP vs. OFSP**

<table>
<thead>
<tr>
<th></th>
<th>WFSP (Baseline n=431)</th>
<th>OFSP (Baseline n=431)</th>
<th>WFSP (Endline n=329)</th>
<th>OFSP (Endline n=329)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area in m²</td>
<td>116.6</td>
<td>137.6</td>
<td>319.5</td>
<td>296.3</td>
</tr>
</tbody>
</table>
Knowledge, Farmers’ Practices, Attitude and Perception on SP

Knowledge: What is healthier to heat in the morning Bread or Sweetpotato?

<table>
<thead>
<tr>
<th></th>
<th>Baseline (n=431)</th>
<th>Endline (n=329)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bread</strong></td>
<td>11.4</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Sweetpotato</strong></td>
<td>88.6</td>
<td>93.6</td>
</tr>
</tbody>
</table>
Proportion of Farmers who mentioned that the OFSP is much more healthier than WFSP

- **Completely agree**: 43.6% (End-line) vs. 37.5% (Baseline)
- **Agree**: 28.0% (End-line) vs. 21.6% (Baseline)
- **Disagree**: 4.9% (End-line) vs. 5.5% (Baseline)
- **Completely disagree**: 1.5% (End-line) vs. 1.2% (Baseline)
Consumption (7 days) and Dietary Diversity

Percentage Consumption Children < 5 Years of Age

- At least 1 day
- > than 3 days

Baseline:
- WFSP (n=393)
- OFSP (n=391)
- YFSP (n=392)

Endline:
- WFSP (n=204)
- OFSP (n=208)
- YFSP (n=206)

WFSP (n=393)
Baseline
OFSP (n=391)
YFSP (n=392)
WFSP (n=204)
OFSP (n=208)
YFSP (n=206)
### Table: Descriptive Statistics for OFSP Consumption

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Roots Consumed week (Child &lt; 5 yrs of Age)</th>
<th>Size of Roots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.12</td>
<td>1.88</td>
</tr>
<tr>
<td>Median</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.06</td>
<td>.82</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Maximum</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Average Quantity Consumed (g)</td>
<td></td>
<td>214.51</td>
</tr>
</tbody>
</table>
Household Dietary Diversity

- households’ dietary diversity score-HDDS, FAO

<table>
<thead>
<tr>
<th></th>
<th>Baseline HDDS</th>
<th>Endline HDDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall (n=423)</td>
<td>5.0</td>
<td>6.6</td>
</tr>
<tr>
<td>Zambezia (n=70)</td>
<td>5.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Sofala (n=70)</td>
<td>6.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Manica (n=70)</td>
<td></td>
<td>5.6</td>
</tr>
<tr>
<td>Inhambane (n=71)</td>
<td></td>
<td>7.5</td>
</tr>
<tr>
<td>Gaza (n=71)</td>
<td>4.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Maputo (n=71)</td>
<td>4.3</td>
<td>7.8</td>
</tr>
</tbody>
</table>

< 4 poor diet diversity
4-5 medium
6> adequate
Further studies

• How effective was the DVM versus Massive distribution?
• Strong Government Commitment?
• New varieties (Double Purpose)?
• Integrated approach (Agriculture and nutrition)
OBRIGADO PELA ATENÇÃO
Venda da Batata Doce

Venda das Raízes de BD

<table>
<thead>
<tr>
<th></th>
<th>Baseline (N=431)</th>
<th>End-line (N=329)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vende BD</td>
<td>22.9</td>
<td>25.1</td>
</tr>
<tr>
<td>Não Vende</td>
<td>77.1</td>
<td>74.9</td>
</tr>
</tbody>
</table>

% de Produtores

Vende BD

Não Vende
Algum Impacto Imediato?

• Extensionistas com premios devido ao bom desempenho na multiplicacao da rama (Ex Sr Lucas em Massinga)

• Produtores com casas, e meios de transporte melhorados pela venda da rama (Ex: Sr Nteia em Nhamatanda)

• Muito pessoal de campo e escritorio treinado sobre os aspectos de producao e colheita de dados
Conhece um DVM

Baseline (N=431)  
Conhece: 45.4

End-line (N=329)  
Não Conhece: 54.6

% de Produtores
Idenficação das novas Variedades

**Percentagem dos Inquiridos que Conhecem as Novas Variedades**

- **Jane**: Conhece - 6.3%, Não Conhece - 93.7%
- **Nananga**: Conhece - 8.3%, Não Conhece - 91.7%
- **Irene**: Conhece - 49.2%, Não Conhece - 50.8%
- **Delvia**: Conhece - 21.3%, Não Conhece - 78.7%
- **Erica**: Conhece - 7.1%, Não Conhece - 92.9%
- **Melinda**: Conhece - 5.5%, Não Conhece - 94.5%
- **Surnia**: Conhece - 8.3%, Não Conhece - 91.7%
- **Bela**: Conhece - 7.5%, Não Conhece - 92.5%
- **Tio Joe**: Conhece - 4.3%, Não Conhece - 95.7%
- **Gloria**: Conhece - 5.1%, Não Conhece - 94.9%
- **Amelia**: Conhece - 6.7%, Não Conhece - 93.3%
- **Ininda**: Conhece - 5.1%, Não Conhece - 94.9%
- **Esher**: Conhece - 2%, Não Conhece - 98%
- **Lourdes**: Conhece - 1.6%, Não Conhece - 98.4%
- **Cecilia**: Conhece - 8.3%, Não Conhece - 91.7%
Conservação das Ramas

Conservação da Rama

Baseline (N=431)
- Conserva: 72.8%
- Não Conserva: 27.2%

End-line (N=329)
- Conserva: 77.1%
- Não Conserva: 22.9%