OFSP Processing in Mozambique
SUSTAIN Mozambique operational setup

• Intervention area: Two development corridors (Maputo & Beira)

• Targets:
  • 35,000 rural hh with vines and nutrition training
  • At least one processed product on the market with annual turnover of US$80,000
  • 300hh connected to production chain

• Approach:
  • Rural households through national non-governmental implementation partners ADEM and UCAM with network of locally recruited facilitators
  • Selection of potential processors based on perceived capacities
  • Investment in recipe development, training, equipment, product promotion and commodity chain linkages
  • Partnership with EIL + CIP-Nairobi
Achievements: OFSP and nutrition trainings

<table>
<thead>
<tr>
<th>Province</th>
<th>Distribution over 01/01/17 – 30/04/17</th>
<th>Total reached</th>
<th>Target mid 2017</th>
<th>% of target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gross data  Female headed Target group Repetition(^a) Net (30/4/17)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manica</td>
<td>12894 n.a. 12894 n.a. 12894</td>
<td>32843</td>
<td>23600</td>
<td>139%</td>
</tr>
<tr>
<td>Sofala</td>
<td>1977 n.a. 1977 n.a. 1977</td>
<td>8514</td>
<td>7400</td>
<td>115%</td>
</tr>
<tr>
<td>Maputo</td>
<td>2136 495 1575 150</td>
<td>3606</td>
<td>4000</td>
<td>90%</td>
</tr>
<tr>
<td>Total</td>
<td>17007 495 16446 150</td>
<td>44963</td>
<td>35000</td>
<td>128%</td>
</tr>
</tbody>
</table>

Nutrition trainings

<table>
<thead>
<tr>
<th>Province</th>
<th>01/01/2017 till 31/03/2017</th>
<th>Cumulative since start project</th>
<th>Target Mid 2017</th>
<th>%Target 31/03/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Events Particip. Female</td>
<td>Events Participants Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manica</td>
<td>248 7770 n.a.</td>
<td>868 28080 15454</td>
<td>23600</td>
<td>119%</td>
</tr>
<tr>
<td>Sofala</td>
<td>27 993 n.a.</td>
<td>174 5478 3399</td>
<td>7400</td>
<td>74%</td>
</tr>
<tr>
<td>Maputo</td>
<td>0 0 0</td>
<td>47 1616 1189</td>
<td>4000</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>275 8763 0</td>
<td>1089 35174 20042</td>
<td>35000</td>
<td>100%</td>
</tr>
</tbody>
</table>
Two technologies as complementary strategies

**Juice**
- Successfully piloted in Rwanda
- Recipe development and taste testing in Maputo and later Manica
- Relies on imports (bottles, ascorbic acid)
- Demanding in hygiene, business management

**Bakery products**
- OFSP/Soy biscuits as innovative recipe
- Potential to increase viability of soy and OFSP processing
- Puree making on the basis of existing investment
- On-site root processing and transformation in bread/pastry
Processor development over project life-span

- Partner selection
- Product development
- Investment in equipment
- “Tio Joe” promotion
- Product diversification

2014

Manica

Fresh market development

2015

2016

2017

Maputo

“Hidden” debts induce economic crisis, currency devaluation, collapse of purchasing power

Bakeries to achieve project targets
Achievements – Value chain

- Processing started only in August 2016
- 2 corridors
- 4 products (juice, biscuits, puree, bread/bakery)
- 2 chains (roots to end product and roots to intermediary product)
- US$30,500 turnover in 8 months (56% of target)
- 93% of all value is bread
- <130 farmers connected
## Status of OFSP processing initiatives

<table>
<thead>
<tr>
<th>Business</th>
<th>Product</th>
<th>CIP</th>
<th>Raw material</th>
<th>Status</th>
<th>Main difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zebra Farm</td>
<td>Juice, puree, bakery</td>
<td>RTPC</td>
<td>Roots</td>
<td>Struggling</td>
<td>Diverse</td>
</tr>
<tr>
<td>Papu</td>
<td>Bakery</td>
<td>RTPC</td>
<td>Roots</td>
<td>Stopped after 6 months</td>
<td>Internal, product</td>
</tr>
<tr>
<td>Nautilus</td>
<td>Bakery</td>
<td>-</td>
<td>Roots</td>
<td>Continues</td>
<td>Scaling out</td>
</tr>
<tr>
<td>Bico de Ouro</td>
<td>Bakery</td>
<td>-</td>
<td>Roots</td>
<td>Continues</td>
<td>Internal</td>
</tr>
<tr>
<td>Dondo</td>
<td>Bakery</td>
<td>C</td>
<td>Puree</td>
<td>Stopped after trying</td>
<td>Internal, distance</td>
</tr>
<tr>
<td>Manga</td>
<td>Bakery</td>
<td>C</td>
<td>Puree</td>
<td>Stopped after while</td>
<td>Distance</td>
</tr>
<tr>
<td>Bom Pão</td>
<td>Bakery</td>
<td>RT</td>
<td>Puree</td>
<td>Stopped after training</td>
<td>Internal</td>
</tr>
<tr>
<td>Elizabete</td>
<td>Bakery</td>
<td>Zebra</td>
<td>Puree</td>
<td>Stopped?</td>
<td>Supply?</td>
</tr>
<tr>
<td>Tambara 2</td>
<td>Bakery</td>
<td>Zebra</td>
<td>Puree</td>
<td>Stopped?</td>
<td>Supply?</td>
</tr>
<tr>
<td>Dossivit</td>
<td>Culinary</td>
<td>C</td>
<td>Roots</td>
<td>Start-up</td>
<td>Lack of investment</td>
</tr>
</tbody>
</table>

**CIP’s role:** Recipe development, Training, Equipment, Product promotion and Commodity chain linkages
Processor experiences

Maputo Bakery
• Located at strategic position in better-off neighbourhood
• Established “household name” in the city
• Made his own bread recipe after tasting CIP’s prototype
• “Special breads” as opportunity to escape price regulations and attract market segment
• Buys roots on open market through its own middleman
• Processes ... kg/month

Manica processor
• Recommended by local government
• Supported by AgDevCo and GAIN as soy processor pilot/pivot
• Investment by CIP in equipment, training and recipe development
• Started with juice but moved into puree/bakery when macro-economic conditions changed
• Has his own farm and producer network set up by CIP
• Processes .. Kg/month
Lessons learned

For CIP
• Be responsive to changes in the macro-economic context
• Fresh root supply is crucial; having a large, quality supply pool helps;
• Variety specific end products limit your options
• Assess needs of the partner: they may be outside your scope
• Small investments may have more impact
• Be open to learn from entrepreneurs

For the business operators
• Dedicate time and concentration to trainings
• Be able to assess the quality of equipment
• Ensure adequate staff, stock and process management
• A diversified product portfolio adds opportunities and reduces risks
• Action radius is limited
• Margins are narrow and there is no pot of gold
Constraints and opportunities

Constraints
• Root washing and peeling is labour intensive and does not fit well in certain business cultures
• Labourers feel underpaid and entitled to theft
• Import dependency kills a business
• High expectations from root producers, partners

Opportunities
• There is a clear demand for OFSP products
• New OFSP varieties compete successfully at farm level raising fresh root supply
• There are good recipes and processing technologies
• Perhaps there is a pot of gold somewhere
ASSANTE SANA