Pulse Value Chains in Mozambique, Angola and Honduras, with a special look at gender participation

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Presented by David Kiala, Juan Carlos Rosas and Rick Bernsten
Research teams

- **Angola**
  - Coordinated by D. Kiala (Univ. Agostinho Neto) in collaboration with C. Donovan
  - Multidisciplinary team of private/public sector participants (e.g., UAN, IIA, Dry Pulses CRSP-UPR, FS Office, MOA, MOC, Chevron)

- **Mozambique**
  - Coordinated by F. Mazuze (head, CESE) in collaboration with I. Cachomba (CESE), C. Donovan & G. Mlay (FSP—Mozambique)
  - Multidisciplinary team of private/public sector participants (e.g., SIMA, Dry Pulses CRSP—Penn State, MOA)

- **Honduras**
  - Coordinated by J.C. Rosas (EAP), in collaboration with R. Bernsten
  - Multidisciplinary team of private/public sector participants (e.g., EAP, NGOs. 3rd party certifiers, PFID/MSU, Kalsec, TransFair USA, US food retailers)
Mozambique and Angola

- Understand pulse value chain (VC)
  - Address the dearth of pulse VC studies in Angola and Mozambique
  - Analyze the behavior of different actors in supply and demand
  - Identify constraints and opportunities for greater efficiency in pulse VC
  - Link value chain analysis to which impact on food security
Research Methods

- Rapid market appraisals
- Semi-structured interviews with traders and farmers
- Additional key informant interviews
- Secondary data from rural HH surveys (World Vision PRORENGA 2009, TIA 2008)
- Price data (SIMA/Mozambique)
Results
Angola: Marketing Channels for Common Beans

- Producers
- Regional Markets
- Wholesale
- Itinerant Traders
- Retailers
- Consumers
Moz: Marketing channels for Common beans

Producers

National traders

Local traders

Wholesale

Retailers

Consumers
Moz: Marketing channels for Common beans

Producers

Local traders

Wholesale

Retailers

Consumers
### Angolan farmers in the Highlands: Who markets the common beans?

<table>
<thead>
<tr>
<th>Member responsible for sales</th>
<th>Gender of head</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Overall</td>
</tr>
<tr>
<td>Head</td>
<td>73</td>
<td>57</td>
<td>68</td>
</tr>
<tr>
<td>Spouse</td>
<td>19</td>
<td>38</td>
<td>24</td>
</tr>
<tr>
<td>Both</td>
<td>7</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Female is at least one of the responsible people</td>
<td>26</td>
<td>57</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: ProRenda survey, Angola, 2009
### Mozambican farmers: Sales by Gender

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Gender :head of the HH</th>
<th>Male</th>
<th>Female</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common beans</td>
<td></td>
<td>32</td>
<td>3</td>
<td>35</td>
</tr>
<tr>
<td>Cowpea</td>
<td></td>
<td>8</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: TIA, 2008
## Angola: Bean production costs, marketing costs, margins

<table>
<thead>
<tr>
<th>Receipts/costs/margins</th>
<th>Gender of head</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Receipts (Kw)</td>
<td>8,056</td>
<td>2,700</td>
</tr>
<tr>
<td>Price per kg sold (Kw/kg)</td>
<td>70</td>
<td>68</td>
</tr>
<tr>
<td>Costs (Kw)</td>
<td>1,521</td>
<td>813</td>
</tr>
<tr>
<td>Production costs (Kw per kg prod.)</td>
<td>8.7</td>
<td>12.3</td>
</tr>
<tr>
<td>Marketing costs (KW per kg sold)</td>
<td>3.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Gross margins (Kw)</td>
<td>6,535</td>
<td>1,887</td>
</tr>
<tr>
<td>Total quantity sold (% of total production)</td>
<td>69</td>
<td>61</td>
</tr>
</tbody>
</table>

| Number of sample observations          | 144           | 111     | 255     |

*NOTES:* Kw = Kwanzas. Costs include purchased inputs, hired labor and reported marketing costs. Variables are at the household level. Estimates weighted to reflect population. Source: ProRenda Survey 2009.
Moz: Access to price information and credit

Source: TIA, 2008
In general the volume of beans and cowpeas offered in the market was small to sustain food security.

The presence of women in all level of commercialization’s chain was obvious.

Availability to consumers depends on marketed quantities from producers.

Price variation in time and space (seasonability).
- Domestic demand prevails in pulse value chain indicating that beans and cowpeas are used mainly for HH consumption.
- There is no processing of beans or cowpeas
- Purchase of pulses is influenced by the quality of the grain (ex: varietal mixture, color, size of the grain)
Market policies, structure, conduct and government interventions in the areas of study are limited.

Market infrastructure is also limited.
Conclusions

- Common beans Value Chains are relatively short and do not yet take advantage of regional/export opportunities.
- Separate regions for cowpea and common bean production and marketing.
- High seasonality, especially supply of cowpeas.
- Price information on pulses marketing are limited.
Recommendation

- Policy makers should address market organization
HONDURAS

- **Research on Reducing Input Costs**
  
  **Constraint:** bean farmers can not afford the increasing cost of purchased inputs

  **Methods:** On-farm trials/demonstrations with CIALs (local research committees) to evaluate the efficacy of farmers

  ✓ producing organic fertilizer (compost, bokashi),
  ✓ applying *rhizobium* inoculant,
  ✓ using locally-produced pesticides/fungicides.
Results

- Organic fertilizers & rhizobium increase beans yield on low inorganic fertilizer input farms

- Locally-produced pesticides made from household items (e.g. detergents, oil, ethanol) and plant extracts (e.g., *Gliricidia*, hot pepper, onion, parsley) are useful in controlling some bean pests

- Farmers, NGO staff received training in making locally-produced inputs
HONDURAS (cont)

- **Research on Identifying New Markets**

  **Constraint:** Farmers mostly sell beans at harvest and receive low prices

  **Methods:** Identify a export market that will pay farmers a “premium” price

  ✓ Identify process/requirements for farmers to become “fair trade” certified & apply

  ✓ Recruit farmer/farmer association interested in marketing FT beans

  ✓ Identify an up-scale US food retailer interested in purchasing FT beans & negotiate a supply contract
HONDURAS (cont)

Results

✓ IMO (third-party) agreed to certify the farmer association ($US 2,700 for audit visit)

✓ Whole Food Markets (WFM) agreed to purchase 20 mt (1 container) of small red beans for delivery in Jan. 2012, and cover all market chain costs (e.g., IMO visit, farmgate price ($US 0.60/lb, fair trade premium of 10%, broker fees, transporting container, customs paperwork, sea transport).

✓ In early 2011, farmer association agreed to sell their beans for $US 0.60/lb

✓ As local prices increased to historically high levels, in May 2011 the farmers wanted US$ 0.85-0.90/lb—expecting prices to remain high
HONDURAS (cont)

✓ WFM only will to pay a maximum price of $0.75/lb, so negotiations terminated

**The Challenge**

✓ FT certification process is extremely complicated

✓ Farmers are used to selling on the spot market, not forward contracting

✓ It will be challenging to convince the farmers of the long-term benefits from developing FT supply relationships
Thank You
Obrigado