Pathways to Growth through Smallholder Commercial Farming in Mozambique

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Workshop on Transformation of Agri-food Systems and Commercialization of Smallholder Agriculture in Mozambique: Evidence, Challenges and Implications
Maputo, Mozambique, December 9, 2013
What do we mean by transformation of agri-food systems?

A possible definition:

• The process by which the agricultural and food system grows and adapts over time in response to changes in demand driven by domestic and international economic growth
  – Dynamic, systemic, inter-sectoral
  – Major changes in demand for financial services

• Some common indicators
  – Amount, share and composition of agric GDP
  – Share of agric in total employment
  – Share of agriculture in trade
Drivers of agri-food system transformation

Population growth, urbanization and income growth lead to changes in consumption patterns

- drive new agro-processing industries and services
- lead to new or increased market and income opportunities for farmers
- lead to changes in farm-level production technologies
- lead to input supply chain development
Example of poultry sector development in Mozambique

Urbanization and income growth leads to increase in demand for eggs and poultry meat

- \(\rightarrow\) increase in demand for poultry rations
- \(\rightarrow\) demand for a new crop (soja) and increased demand for maize
- \(\rightarrow\) changes in cropping patterns and technology at farm-level
- \(\rightarrow\) increase in demand for improved seed, fertilizer, extension
What do we mean by smallholder commercialization?

Possible definition:

_The process by which smallholder farm-level production systems grow and adapt over time, and integrate with off-farm (input and output) markets in response to changes in economic growth._

**SMALLHOLDER FARMING BECOMES A SMALL BUSINESS ENTERPRISE**
Example indicators of smallholder commercialization

• Amount, share and composition of agriculture in household income
• Value of agricultural production per worker
• Share of agricultural production value sold off the farm
• Share of agricultural inputs purchased off the farm
• Value of capital stock (livestock, irrigation equipment, farm machinery)
Why is smallholder commercialization important?

To capture potential new opportunities to increase income, reduce poverty and improved food and nutrition security:

• Direct poverty reduction
• Indirect poverty reduction (multiplier effects)
• Inter-generational poverty reduction (education of children -> migration to higher value occupations)
What do we mean by successful agricultural policy in a context of agri-food transformation?

“Successful policies lead ultimately to significantly greater numbers of smallholder farmers benefitting in visible ways from access to improved technology and diversified market opportunities and that maximize use of private sector for purposes of sustainability, innovation, and saving government resources”
Three types of transformation at smallholder level

Gross Income = Area X Yield X Value

• Transformation 1 = Increase in area
• Transformation 2 = Increase in yield
• Transformation 3 = Increase in value
Agricultural Intensification: Determinants and Impacts

**REVENUES** = Yield \( \times \) Price

\[ \text{REVENUES} = \text{Yield} \times \text{Price} \]

**COSTS**

- Seed
- Fertilizer
- Labor
- Other
- Costs of supply
  - Input production costs
  - Import policies/practices

**NET RETURNS**

\[ \text{NET RETURNS} = \text{REVENUES} - \text{COSTS} \]

Effects on national income (economic net benefits)

Effects on government budget

Effects on environment
Agricultural Intensification: Determinants and Impacts

- Credit
- Risk mitigation
- Extension

Farmer practices

Physical environment

Potential demand

Research and development

Output markets

REVENUES

Yield x Price

COSTS

Seed
Fertilizer
Labor
Other

Costs of supply

- Input production costs
- Import policies/practices

Effects on national income (economic net benefits)

Effects on government budget

Effects on environment
Do we see a transformation in area cultivated (ha)?

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<tr>
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<td>1.4</td>
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Source: TIA
Do we see a transformation in access to or use of improved inputs?

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<thead>
<tr>
<th>INDICATOR</th>
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<tr>
<td>IRRIGATION</td>
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<td>ANIMAL TRACTION</td>
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<tr>
<td>FERTILIZER</td>
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<td>2.8</td>
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<tr>
<td>IMPROVED MAIZE SEED</td>
<td>5.6</td>
<td>8.7</td>
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<tr>
<td>DISTANCE FERT SELLER</td>
<td>45 km</td>
<td>34 km</td>
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<tr>
<td>DISTANCE SEED SELLER</td>
<td>25 km</td>
<td>22 km</td>
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Source: TIA
Do we see a transformation in value of production (meticais)?

<table>
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<tr>
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<tr>
<td></td>
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<td>Total</td>
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Source: TIA
Do we see a transformation in share of value sold (percent)?

<table>
<thead>
<tr>
<th></th>
<th>Todas explorações com machambas</th>
<th>Explorações com machambas e usam insumos*</th>
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<tr>
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<tr>
<td>Total</td>
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<td>14</td>
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</tbody>
</table>

Source: TIA
Status of smallholder commercialization in Mozambique

• Smallholder commercialization is at a very early stage
• Market opportunities are emerging but capacity of smallholder farmers to respond appears limited.
  – access to farm power to increase area
  – access to irrigation and crop production technologies to raise productivity
  – access to financial services
Challenges for this workshop

• Understand and anticipate likely trends in agri-food system transformation
• Understand constraints of smallholder farmers in different production systems and corridors
• Identify improved policies and programs to enhance smallholder access to improved technologies, markets and financial services
• Improved systems to monitor changes in access and outcomes in terms of food and nutrition security and gender equity in response to policies and programs (impacts)
Obrigado

E bom trabalho !!