Market development in Mozambique: Policy issues to enhance the research agenda

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Outline

- Urgency: Recent events in Mozambique
- Innovation, markets
- Risks for Mozambican farmers
- Low productivity and use of productivity enhancing inputs
- Policy considerations
- Key questions: Making a difference?
Recent events in Mozambique

- Price increases, including basic food staples, and riots in Maputo in early September 2010, highlighting price risks.

- Poverty reduction has slowed in Mozambique, primarily due to lack of progress in the agricultural sector (*Poverty Evaluation Report*), highlighting challenges to investments for productivity and production growth.

- Market led development has been hindered in Mozambique by the lack of various components (*Agricultural Sector Performance Report*):
  - Infrastructure (good roads, rails, communications, electricity, water)
  - Credit systems
  - Technology access and resources for extension

- Continued risks at all levels of value chains.
Conceptual Diagram of a National Agricultural Innovation System

- Informal institutions, practices, behaviors, and attitudes

  Agricultural research & education systems
  - Agricultural education system
    - Primary/secondary
    - Post-secondary
    - Vocational/technical

  Agricultural research system
  - Public sector
  - Private sector
  - Civil society

  Agricultural extension system
  - Public sector
  - Private sector
  - Civil society

  Integration in value chain

  Bridging institutions
  - Political channels
  - Stakeholder platforms

  Agricultural value chain actors & organizations
  - Consumers
  - Processing, distribution, wholesale, retail
  - Agricultural producers
  - Input suppliers

  Agricultural innovation policies & investments

  Linkages to other economic sectors
  - Linkages to science & technology policy
  - Linkages to international actors

  General agricultural policies & investments

  Linkages to political system

Source: Spielman and Birner, 2008
Markets and Innovation

- Value chain approach
  - Producers
  - Input suppliers
  - Traders
  - Warehouse agents
  - Consumers
- Policy environment:
  - Legislation and administrative rules (trade regulations, standards, etc.)
  - Public investments
Example of Tanzania sunflower seeds

- **Constraints**
  - Lack of improved and sufficient seeds, forcing farmers to use their own seeds
  - Unreliable market and low prices for sunflower seeds
  - Production pests and diseases
  - Inadequate improved tillage implements such as ox plow or tractors
  - Unreliable rainfall
  - Inadequate knowledge of improved sunflower production techniques due to poor extension services
  - Stiff competition from edible oil imports.

Example of Tanzania sunflower seeds

- Strengthening innovation
  - Farmers in small cooperative groups
    - Inputs access
    - Technology access and supervision of cropping to ensure quality
  - Jointly market crops, controlling quality in marketing
- Processors also incorporating innovations
  - Building stores, filter rooms, and better sanitation systems on their premises as well as facilities for the oil pressing that adds value, competes with imports

Market-related Risks in the Value Chain

- Changes in supply and/or demand that impact domestic and/or international prices of inputs and/or outputs,
- Changes in market demands for quantity and/or quality attributes,
- Changes in food safety requirements,
- Changes in market demands for timing of product delivery,
- Changes in enterprise/value chain reputation and dependability

Adapted from Larsen et al. Agribusiness & innovation systems in Africa. WB. 2009.
Real monthly wholesale maize grain prices (MTN/kg, base August 2010) Nampula, Quelimane, Maputo, 2005-2010

Source: SIMA.
Real monthly wholesale common bean prices (MTN/kg, base August 2010) Nampula, Quelimane, Maputo, 2005-2010

Source: SIMA.
Markets and productivity growth

- Lack of productivity growth
  - Farmers are not buying inputs
    - Improved seeds, fertilizers, pesticides, veterinary products
  - Why not?
    - Market-related problems:
      - Availability of the inputs in the markets
      - Funds to purchase inputs (credit, cash income)
      - Risk of low returns (output price risk; low quality inputs)
    - Other problems
      - Knowledge to use inputs to get max return
      - Climate risk
      - Etc.
Percentage of farmers using inorganic fertilizers, by Province, 2005-2008

Source: TIA 2008
Percentage of farmers using improved maize seed, by year and province, 2005-8

Source: TIA 2005-8
Percentage of farmers using improved common beans seed, by year and province, 2005-8

Source: TIA 2005-8
Percentage of farmers producing maize who sell maize, by year and province, 2005-8

Source: TIA 2005-8
Percentage of farmers selling common beans, by year and province, 2005-8

Source: TIA 2005-8
Considerations

- Farmers are participating in the markets (TIA)
- Some farmers buy inputs, with or without credit (TIA)
- When farmers have price information, they have higher agricultural incomes and can gain high prices for agricultural products (Mather 2010)
- Animal traction is associated with higher crop incomes
Policy

- Markets in IIAM Strategic Plan
  - Value chain approach focused on two key aspects:
    - For basic staples: reliable, sustainable, efficient production
    - For cash-oriented production: competitive production
  - Technology development based not just on agro-ecological conditions but also socio-economic conditions
    - Contribute to market competitiveness for private sector investments
PEDSA: 5 specific strategic objectives

- Increase agricultural and livestock production, productivity, and competitiveness
- Improve infrastructures and services for markets and trade
- Foster the sustainable use of land, water, forest and fauna resources
- Ensure legal framework and policies that are conducive to agricultural and livestock investments
- Strengthen agrarian institutions
Other Policies/Strategies

- Markets in Green Revolution Strategy
  - Basically this is a production and productivity oriented strategy
  - Market development for outputs mentioned with infrastructure, information systems, standards/grades, agro-processing

- Markets in the PAPA
  - Government as buyer of last resort
  - Infrastructure investments (for private operators?)
  - Voucher distribution for inputs
  - Market information
Markets in the 5-Year Plan of the Government (Plano Quinquenal do Governo)

- **Agricultural sector key strategic objectives**
  - Guarantee increase in production and in food security in the country;
  - Increase the productivity of agricultural activities and of the entire value chain
  - Promote (provide incentives) to increase market-oriented agricultural production
  - Promote sustainable use of land, forests, and fauna
  - Develop human capacity and institutional capacity in the agricultural sector

- **Commerce sector key strategic objectives**
  - Promote marketing oriented to both internal and external markets, to ensure food security and improve the balance of trade
  - Extend commercial networks to support agricultural and industrial development
  - Ensure protection of consumer rights

Much of ag markets content is in PWG section on Commerce, 2.2.20
MINAG Planned Activities
2010/2011

- Credit: Fundo Agricola with AGRA/Standard Bank to USD$25 Million; Revolving fund for Poultry; Credit line for Chokwe
- Voucher program: Input packages with seeds and fertilizers for 0.5 hectares of rice or maize
- Investments in mechanization, storage, market information
Policies and investments enough to make a difference?

- Will seed system development overcome availability constraints? Through private markets?
- Will veterinary inputs be available at accessible prices when and where needed?
- Will output markets be stable and profitable to encourage investments?
- Will producers obtain prices that encourage investments?
- Can farmers associations meet the challenges of smallholder marketing?
- Are there changes in the research system such that technologies make it off the shelf and into the hands of producers, processors, traders?
- Will appropriate technology reach the hands of both men and women farmers, meeting their needs?
Obrigada