Increasing Agricultural Growth and Resilience through Better Risk Management in Zambia

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Introduction

- Low productivity of farmers for both crops and livestock
- Risks: El Nino (droughts and floods), pests (fall army worms and stock borers) livestock diseases.
- Enabling environment-mitigate risk or source of risk
Research Objectives

Main Objective:
To increase the resilience of farmer livelihoods whether outcomes, including volatility as well as the level of rainfall

Specific Objectives:
1) Identifying enabling environment risks;
2) Determining the impact of the enabling environment risks identified above;
3) Propose an improved policy approach/solutions to the enabling environment risks; and
4) To demonstrate how the new approach would increase farmer resilience.
Methodology

1) Literature review

2) Analysis of secondary data and

3) Interviews with stakeholders and farmers/farmer representatives.
STUDY FINDINGS
North/South Maize Yields: 1996-2016

Source: Crop Forecast Surveys
North/South Maize Area Planted: 1996-2016

Source: Crop Forecast Surveys

Indaba Agricultural Policy Research Institute
Zambia Situation in 2015/16 Ag. Season

- Northern region received better rainfall
- Rainfall patterns improved from late January

Source: Vulnerability Assessment Committee
Zambia’s production has become more resilient during El Nino years.

Source: Crop Forecast Surveys, Food Balance Sheets, Various Years)
Livestock production trends

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle</th>
<th>Goats</th>
<th>Pigs</th>
<th>Sheep</th>
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High Livestock Disease Burden!

% Smallholder Households with diseased animals

- CATTLE: 43.5%
- GOATS: 22.1%
- PIGS: 32.42%
- VILLAGE CHICKEN: 48.1%
Enabling Environment- Macro-economic

1) Inflation - rising price for goods and services
2) Exchange rate - high cost of imports e.g fertilisers, chemicals
3) Interest rates - high cost of borrowing

- Both local and international forces at play
Enabling Environment - Macro-economic

![Graph showing inflation rate and exchange rate trends over time. The graph includes lines for food, non-food, and total categories, as well as the exchange rate (ZMW/$). There is a highlighted area indicating a particular period of interest.](image-url)
Enabling environment risks-Policy Response During El Nino Years

The main policy responses used by Zambia over-time are:
1) Removal of import tariffs and other restrictions;
2) Export bans/restrictions;
3) Other export restrictions-SPS requirements, centralized issuing of permits, export taxes;
4) Strategic stock piles;
5) Price controls
Policy Response During El Nino Years

1992/93
+581,000 MT Deficit

Govt removes import restrictions; sets floor price and into-mill and consumer prices

2001/02
+581,294 MT Deficit

Subsidized maize imports later sold to millers undercutting private sector

2004/05
-85,000 MT deficit

MACO issues import permits for 150,000 Mt; import duty waived; FRA undercuts importers

2012/13
+453,995 MT Surplus

Export ban though SI#85; mealie meal price controls; Ban lifted in April 2014

2015/16
+634,681 MT Surplus

Export ban; mealie meal price controls; FRA buys maize from traders and subsidizes millers; Export ban lifted in May 2017
Impact of the enabling environment risk - Price Volatility

Source: Chapoto & Jayne, 2009
Impact of the enabling environment risk - Price Volatility

Source: Chapoto & Jayne, 2015
Export bans discourage private sector investments

Private investments in the entire agricultural value chain tend to be adversely affected by the implementation of unpredictable trade policies.
Export bans do not achieve food security

- Many governments impose export bans during El Nino years as a way of ensuring food security for their citizens:
  - such protectionist policies do not lead to food security
  - even under the tight control of formal trade, informal trade often flourishes
Huge price differences: a major pull factor for informal exports

Mealie Meal Price differences between Zambia and DRC: April, 2016

- **Kitwe, Zambia**:
  - Breakfast meal price: K85 per 25kg

- **Kasumbalesa (Zambian side)**:
  - Breakfast meal price: K175 per 25kg

- **Kasumbalesa (DRC side)**:
  - Breakfast meal price: K250 per 25kg

- **Lubumbashi, DRC**:
  - Breakfast meal price: K400 per 25kg

Source: IAPRI Rapid Survey, 2016
Huge Strategic Reserves and price controls

- Maintaining a huge national maize stocks is a drain to the national treasury
  - Consumption patterns are changing
- Price controls such as subsidies to millers do not work because millers do not pass the benefits to consumers
  - rural poor do not consume commercial mealie meal (only 6% based on RALS 2015)
Consumption patterns are changing
Yet livestock budget share of the Poverty Reduction Program still remains very small.
WHAT SHOULD THE POLICY CHOICE LOOK LIKE GOING FORWARD?

- Policies that promote modernization of the agricultural sector (e.g. mechanization, irrigation, increased use of ICT)
- Recognize that consumption patterns are changing in ways that are creating opportunities for smallholder farmers
- Openness to trade in food and investments led by the private sector (especially food staples)
- Policy stability – to attract private sector investment. Government funds alone are not enough to meet the rising demand
**WHAT SHOULD THE POLICY CHOICE LOOK LIKE GOING FORWARD?**

**Embrace the new marketing innovations**
- Crowd in private sector; both local and international
- Governments should put in place regulations that promote competition and more innovation

**Substitution Among Food Staples**
- Consumption diversification provides a key to helping vulnerable households deal with food price shocks.
- Move away from maize centric policies

**Governments should focus public investment into areas that stimulate growth instead of private goods**
- Subsidies should not crowd out private sector participation

**Give investment incentives (e.g. Tax breaks) should be given to both local and international investors**
Livestock sector
• Sensitisation of farmers on diseases of national importance
• Livestock vaccination campaigns
• Farmers to use flexible vouchers
• Restocking of livestock

• Rehabilitation of existing breeding centres
Enactment of the Agricultural Marketing Act

Limit FRA’s role in maize marketing. Help Capitalise the commodity Exchange by buying strategic reserves through ZAMACE

Government should promote private sector storage by eliminating pan territorial and seasonal pricing

Moderate price volatility through trade. Maintain an open border maize policy in order to make Zambia a reliable supplier
THANK YOU