Integrating Food and Nutrition Security into Economic Transformation and Industrialization Agenda: How can agriculture be the driver rather than follower of economic transformation in Tanzania?

New Dodoma Hotel, Dodoma

14th - 16th February, 2018
TANZANIA CEREAL STORAGE SCOPLING MISSION
(REQUEST TO FAO TO HELP ADDRESS CEREAL LOSSES)

Activities and findings

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CURRENT CHALLENGES AND OBJECTIVES OF THE STUDY

Challenges:

- Post-harvest **losses of grains** about **40 percent** in remote areas
- Inadequate **storage facilities** and **management capacity**
- Limited market access.
- **Weak linkages** with national and international cereal markets
- Unexploited production and **export potential in Eastern Africa**,  
- Partially achieved national **food security**.

Objectives:

- Identify the causes of post-harvest losses
- Analyse the scope of a potential FAO intervention
- Prepare the road map for an intervention
SCOPING METHODOLOGY

- Literature reviews were made
- Consulted key stakeholders in the cereal value chains.
- Government of officials in various Ministries
- Technical and financial development partners
- Commercial actors and their organizations.
- Field visit was made to Dodoma
- Visited urban and district markets, including Kibaigwa market.
In 2014 cereal production was approximately **11 million tonnes** (FAOSTAT).

National **self-sufficiency** rate of maize is estimated at **120 percent** by the MALF.

**Exports increased steadily since 2005**, but declined due to export bans for national food security reasons.

**Tanzania is a potential** maize producer for the whole of East Africa.

**Lack of storage capacity** forces Tanzania export maize at **low prices**.

Domestic and international trade and **market policies prevent farmers obtaining better prices** and increase risks for the formal commercial sector.
Informal markets accounts for ~80% of maize remaining is handled by NFRA from rural buying posts or from established farmers’ organizations / cooperatives.

Informal marketing arrangements place farmers in a weaker position.

Exports to neighbouring countries are unregulated.

Market margins are high due to inefficiencies in supply chains,

Prices vary greatly between harvesting and periods of scarcity.

Actors with access to storage, financial services are able to take advantage of price fluctuations.

Post-harvest losses are significant
STRUCTURE OF THE POST-HARVEST SYSTEM

Key supply chain actors

1. Small holder farmers (0.5 to 2mt) (food security)
2. Small holder farmer (3 to 5 mt) (the emerging farmer)
3. Village /community level
4. Middle level
5. District markets
6. NFRA
7. Agro processors
PERFORMANCE OF THE POST-HARVEST SYSTEM

Household level – two types of farmers
- The food insecure and the farmer with excess to market (emerging farming)
- The emerging farmer produce for the market 3 to 5 tons
- Underserved in terms of storage, transportation and general support
- High cost per unit of available technology to store grain for commercial use
- This farmer is left vulnerable to brokers, buyers and agro-processors

Community/village level
- These range between 200 to 600 tons
- Total national storage for such warehouse is about 82,000 tons which is 1.2% of total production
- In the last decade community storage has been widely promoted (COWABAMA)
- The majority of these warehouses are underutilised.
- Underutilisation can be attributed to informal markets that handle ~ 80% of marketed production
PERFORMANCE OF THE POST-HARVEST SYSTEM

Middle level (3000 to 5000 tons)

THE MISSING MIDDLE
Middle level (3000 to 5000 tons)

- Normally located in district capitals, trading centers - commercial, wholesale, SGR, export trading
- Very few are available in Tanzania at the moment except NFRA, agro-processors like Bakhresa but not used for grain trading or warehouse receipt system.
- Those available are remotely located and need refurbishing or were converted to other uses
- Some investments were undertaken with project support, but their number is limited
- No multinational player is active on the domestic market in this sector for locally produced cereals.
- No specific Government policy to promote or encourage this sector and as a result the informal sector is dominant.
- This is missing middle is critical for the development of a formal grain market.
District markets

- These are informal markets for commodity trading
- They form the dominant marketing channels of cereals in Tanzania.
- On average, each region has 2 or 3 markets making them more than 52 district markets.
- More than 80% of all commodities produced are sold through these district markets.
- Brokers, buyers representing processors, and institutional buyers converge to the district market for all their grain requirements.
- Individual farmers bring their grain and meet any of the numerous buyers or brokers and “agree” on a price and the farmer is paid cash.
- Even institutional buyers, international traders and wholesalers procure their grain from informal markets or have their networks of brokers.
### District markets – Kibaingwa Market

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<tbody>
<tr>
<td>Intake</td>
<td>39,856</td>
<td>60,904</td>
<td>50,959</td>
<td>90,134</td>
<td>83,514</td>
<td>58,062</td>
<td>71,739</td>
<td>116,095</td>
<td>96,587</td>
<td>65,867</td>
<td>84,071</td>
<td>27,756</td>
<td>46,599</td>
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<td>Dispatches</td>
<td>35,912</td>
<td>58,606</td>
<td>47,398</td>
<td>93,068</td>
<td>94,518</td>
<td>64,294</td>
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<td>102,863</td>
<td>67,921</td>
<td>89,920</td>
<td>32,554</td>
<td>41,653</td>
<td>934,433</td>
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<td>variance</td>
<td>3,944</td>
<td>2,298</td>
<td>3,561</td>
<td>-2,934</td>
<td>-11,004</td>
<td>-6,232</td>
<td>-4,034</td>
<td>-13,858</td>
<td>-6,276</td>
<td>-2,054</td>
<td>-5,849</td>
<td>-4,798</td>
<td>4,946</td>
<td>-42,290</td>
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<td>% losses</td>
<td>10%</td>
<td>4%</td>
<td>7%</td>
<td>3%</td>
<td>13%</td>
<td>11%</td>
<td>6%</td>
<td>12%</td>
<td>6%</td>
<td>3%</td>
<td>7%</td>
<td>17%</td>
<td>11%</td>
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</table>
KIBAIGWA MARKET: difference of incoming and outgoing volumes - losses to farmers

Average annual losses of 3,650 tonnes or TZS 1.3 billion

Total losses of nearly 44,000 tonnes or TZS 16 billion between 2005 and 2016
Industrial processors

- The **major users** of grain.
- Their **visibility** as buyers of grain is **obscure** and they do not generally purchase directly from farmers.
- They **use intermediaries/brokers** who source from **district markets** where farmers bring their grain.
- Because of huge volumes and the amount of money involved, this has **made their brokers more powerful** such that they can set the market price.
- The grain is transported in 20 to 30 ton lots to processing facilities in Dar es Salaam.
- The **grain when procured cannot be traced back to farmers**
- The use of informal markets by large players, including processors, has **contributed to the underutilisation of warehouses at village and the middle level** and weakened farmers’ marketing power.
- Large agro-processors **could play a key role in formalizing grain markets** by using formal channels.
- There is scope for **public-private partnerships to promote formal market** development by leveraging the market power of agro-processors.
CAUSES OF LOSSES AND THEIR EFFECTS

- Characterised by poor handling and storage facilities.
- Lack of Grade & standards and the use of 90 kg and 120 kg bag instead of standard 50kg results in poor quality grain.
- Informal marketing system are risky because they cannot be expanded in event of bumper harvests (as happened in 2015)
- Lack of adequate storage and formal market system causes high price variability and strong seasonality of prices;
- Weak formalized linkages with export markets leads to high volumes of informal cross-border trade
CAUSES OF LOSSES AND THEIR EFFECTS

- Dominance of bulking by brokers with short term interest and renting seeking behaviour.
- Farmers have less bargaining power at district market
- Underutilization of commercial storage facilities results in lack of incentives to invest aggregation and storage systems.
- Agro-processors use untraceable commodities through brokers who under pay farmers (corporate irresponsibility)
- Unregulated trading make informal trade even more pervasive
- The regulatory environment (export bans) contribute to the risks for large-scale formal investments
POLICY OPTIONS TO FORMALIZE GRAIN MARKETS IN TANZANIA

Promote a cereal marketing system that proactively assures quality management at every step of the value chain. The final outcome being a well structured cereal trading system that is transparent to all actors, the output of which is grain differentiated by quality and absorbed through national and regional markets.

Hard and soft infrastructure:
- Investment in decentralized mid-level warehousing located between the local and end markets
- Promotion of support services for quality and inventory management.
- Grades & Standards and use of 50kg bag both for grain quality and worker rights

Public-private partnership:
- There is scope for public-private partnerships to promote formal market development by leveraging the market power of agro-processors.
- Public funding sources for district-level warehouses could be leveraged through NFRA and leased to investors under PPP agreement. Agreements could include stipulations on purchase from farmers organizations or licensed traders only.
POLICY OPTIONS TO FORMALIZE GRAIN MARKETS IN TANZANIA

Facilitate formalization by embracing entrepreneurship:

- Simplify registration and licensing systems: set up one-stop shops for registering businesses or obtaining trade licenses; rationalizing business registration and licensing regime by deploying user-friendly IT-based systems.

  Currently, to register a new business in Tanzania, it takes roughly 28 days and costs almost 50% of the average income per capita for an individual to follow eleven separate registration procedures (World Bank EBA, 2017).

- Incentives are crucial to encourage formalization. Retroactive regulations on taxation should be avoided in all circumstances for businesses that formalise.

- Simplify tax administration as sometimes a complex system is a greater disincentive than tax rates.

- Dialogue with informal market actors to understand their constraints (including resistance to formalisation) and generate buy-in. It is essential that the relationship between government and informal traders moves away from mutual suspicion towards mutual support.

Source: FAO. 2017. Formalization of informal trade in Africa: Trends, experiences and socio-economic impacts. Rome
Thank you.

The theme for 4th Annual Agriculture Policy Conference is ‘Integrating food and nutrition security into economic transformation and industrialization agenda.’ Where do you mostly buy/get fresh produce - mboga, matunda etc?

1. Traditional open air market - sokoni au gengeni: 52%
2. Supermarket: 19%
3. New format market / frame zenye maduka: 13%
4. Mangi Shops: 6%
5. Own farm / garden: 8%
6. Others: 2%