

Maize and Rice Value Chains in Tanzania: the case of Mvomero District



An AgriDiet Research Brief

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An objective of the AgriDiet Project was to identify the main factors within agricultural systems, above the household level, which influence local food and nutrition security. Mvomero District in Tanzania was used as a case study. As maize and rice were the most important crops having a direct impact on the food security and nutrition status of households in the district, an analysis of their value chains was undertaken.

Methods

Data were collected through key informant interviews with actors at different stages of the value chains – including farmers, input sellers, crop buyers, millers, transporters and food retailers. This information was supplemented by data collected in the pre-harvest survey of 251 farm households in Mvomero District.

Value Chain Characteristics

Table 1 summarises some key indicators related to the value chains for maize and rice in the study area – including production levels, input costs and price levels at various stages.

Table 1: Value Chain characteristics for Maize and Rice Crops in Tanzania (Mvomero District*)

Characteristics for 2013 crop season	Maize	Rice
Production (average/ acre)	598 Kg	272Kg
Total Production (average/ household)	1,573Kg	740Kg
Percentage harvest sold	42%	34%
Total cost of purchased inputs for production per crop	TSh.8,350	TSh.14,300
Farmer: Price at farm gate (average/Kg)	TSh.335	TSh.700
Trader: Price at urban market (average/Kg)	TSh.550	TSh.812
Processor: Price to retailers (average /Kg)	TSh.750	TSh.956
Consumer: Price milled product (average/Kg)	TSh.1,000	TSh.1,700

*Data from AgriDiet Farm Household Survey, February 2014

Key issues

- Maize and rice productivity is low with just 60% of farmers using relatively expensive purchased inputs of fertilizers, chemicals and seeds while quantities used by these farmers were well below recommendations.
- Low levels of capital investment were identified at various points along the value chain for both commodities. At farm household level, this impacted on the ability to access good quality and affordable inputs while crop buyers and inputs dealers also lacked sufficient capital to deal in large volumes of commodities which would enable them to offer better prices to their customers.
- The development of improved and appropriate irrigation systems could have substantial positive effects on the productivity of both commodities.

- Farmers have limited access to agricultural extension services which constrains their access to information on best practices in production, storage and selling.
- The lack of secure and appropriate storage facilities for maize and rice impacts negatively on food security by increasing communities' reliance on the market for food supplies in times of shortage, while poor quality facilities reduce the value and quality of the commodities available for consumption and sale.
- Poor road infrastructure means it is expensive to transport commodities to market and a proportion of these higher costs is passed on to the farmer in the prices paid by traders.
- While market engagement by farm households is significant for maize and rice, market information is asymmetric and local actors have very little access to information about prevailing prices, market demands and/or the cost structure of the relevant market value chains.
- Lack of collective marketing arrangements means that producers are not in a position to collectively bargain for better prices or to share information on prevailing market conditions.

Conclusions and recommendations

- Low productivity and production levels, arising from rain-fed cropping on fragile lands is compounded by a lack of support services such as extension and credit and so makes it difficult to improve and diversify production toward more nutritious food.
- Low levels of income from the sale of major crops such as maize and rice means it is difficult for farmers to improve their diets through relatively expensive foods purchased in the marketplace.
- Farm households obtain low returns for sales due to a marketing system that is plagued by poor infrastructure, lack of organized marketing and market information as well as multiple taxes and levies.
- For the majority of households in the district, farming is their main source of income. However, for many farm households it does not yield enough income to meet all the dietary and other household needs such as clothing, education, health and modern housing.
- Improving household incomes, and consequently nutrition, can be achieved through improving farm productivity as well as developing a marketing system that ensures better returns from farming as well as services to support a more diversified and nutritious local food system.

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