

## Targeting right: Regional variation in food crop commercialization

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### Executive Summary

Policy initiatives in Uganda have continuously laid emphasis on the need to transform the agriculture sector from subsistence farming to commercial. The country is also zoned into production regions for purposes of intensifying production based on comparative and competitive advantages. Focusing on the five major crops in Uganda, this policy brief provides evidence on the variation in regional food crop commercialization. It provides evidence in support of the commodity focused approach of targeting specific crops in selected agricultural zones. For example it shows that cassava is a viable crop enterprise for large scale commercial production in Northern Uganda while bananas is a viable enterprise for intensive production in Western Uganda. The policy brief emphasizes the need to pay attention to the agricultural zones in guiding interventions in crop farming.



### Introduction:

Agricultural development in Uganda is premised on the 2004 zoning strategy that was done by Ministry of Agriculture Animal Industry and Fisheries (MAAIF). It divided the country into ten agricultural production zones and commodities best suited for each zone (Figure1). MAAIF's plan since 2010/11 financial year was meant to focus on the commodity approach in which public sector support was to be directed to specific commodities in the ten agricultural production zones<sup>1</sup>. This was based on the pretext that previous interventions that took on a uniform approach of promoting agriculture development in all regions with no targeting of commodities did not yield much.

Currently 66 percent of the population are net buyers of food and rely on the market for more than 25 percent of the value of food that they consume<sup>2</sup> and only 12 percent of households are net sellers of food. Consequently there is an untapped market for agricultural commodities and farmers have the opportunity to tap on the existing market. The policy brief provides evidence for regional variation in food crop commercialization and shows whether the current trends in commercialization are in tandem with the zonal production areas identified way back in 2004 by the Ministry of Agriculture Animal Industry and Fisheries.

### Agriculture zones and commercialization in Uganda

In 2004, Uganda was divided into ten agriculture production zones with the overall aim of increasing household incomes through sustainable and profitable zonal agricultural production for exports. An Agricultural zone is a broad area with similar socio economic background and in which ecological conditions, farming systems and practices are fairly homogenous<sup>3</sup>. Within a zone which may cut across districts, more or less the same crops can be grown and the same livestock reared. For purposes of commercialization, it is imperative that promotion of specific enterprises is targeted to areas with high competitive and comparative advantage. It is within this pretext that MAAIF decided to follow a commodity approach of focusing on selecting specific commodities in the ten agriculture zones.

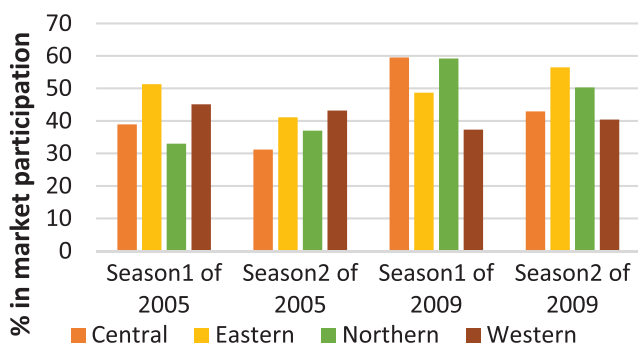
This brief uses nationally representative household panel data collected by the Uganda Bureau of Statistics (UBoS) in 2005 and 2009 to provide evidence on whether commercialization is in line with the commodity approach focus stipulated by MAAIF in the DSIP. Commercialization is defined in terms of whether households participate in the market and the proportion of agriculture output that the household sells to the market. Focus is on the five major food crops grown in country that is: maize, beans, sweet potatoes, cassava and bananas.

### Regional market participation

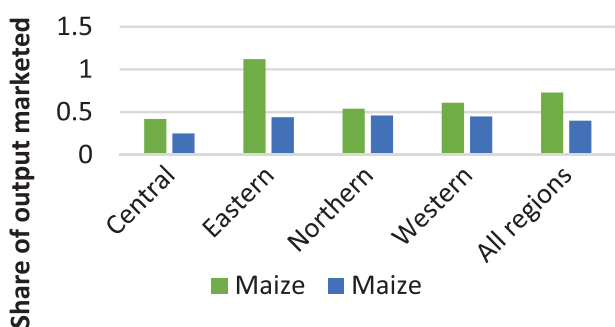
#### Maize

From 2005 to 2009, market participation for maize has increased in all the regions except western Uganda. Northern Uganda reported the highest increase (Figure 1). However, Eastern Uganda has the highest share of maize output sold to the market especially in season one (Figure 2). According to MAAIF’s sector Development Strategic Investment Plan (DSIP), maize is one of the targeted crops for eastern Uganda in districts like Kamuli and Kaberamaido. The Uganda census of Agriculture was carried out in 2008/09 reported that the highest production of maize was from eastern Uganda followed by western and central Uganda and lastly Northern Uganda. In the same year, the highest maize production in the country was reported in the district of Iganga at 303,262 metric tonnes<sup>4</sup>. Given its superiority in both maize production and marketing, commercialization efforts in maize should be focused in the Eastern region mostly.

**Figure 1: Variation in Market participation for maize across regions in 2005 and 2009**



**Figure 2: Average share of maize output marketed across regions in season 1 and 2 in 2005 and 2009**

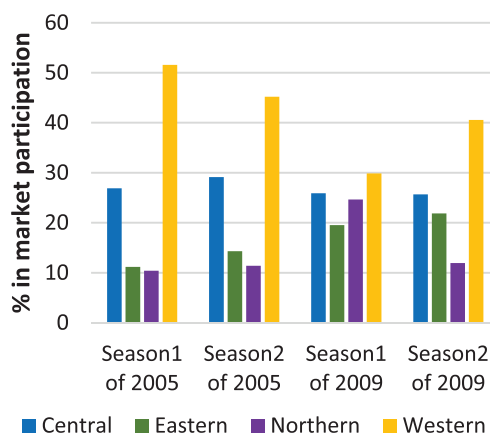


#### Beans

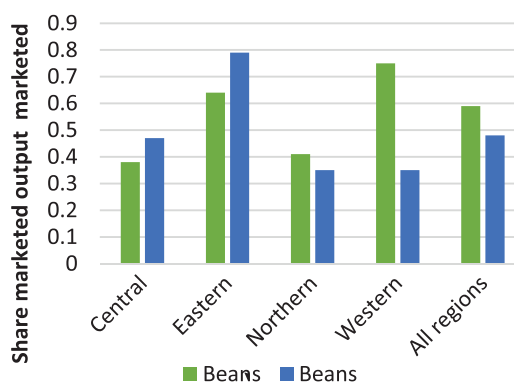
In 2005 and 2009, market participation for beans was highest in western Uganda in both season 1 and season 2 although participation does not vary much between seasons (Figure 4). The share of beans sold to the market is generally highest in eastern Uganda (Figure 5). Production figures from the

Uganda census of agriculture showed that western Uganda has the highest production of beans followed by northern, central and lastly eastern Uganda. The district with the highest production of beans was Ntugamo. Production of beans in eastern Uganda may not be high, however the region has a high affinity of marketing beans. The high cross border trade that takes place in most of the districts in the region incentivizes farmers to buy produce from elsewhere (other regions) and sell.

**Figure 3: Variation in market participation for beans across regions**



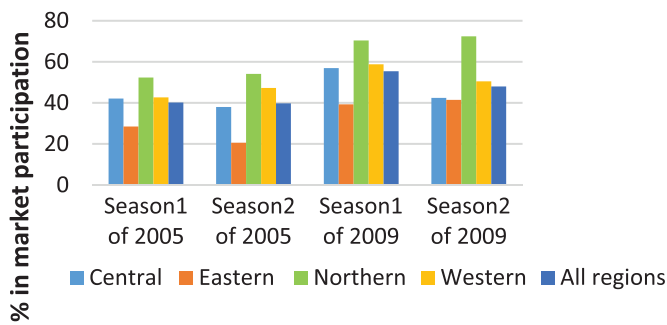
**Figure 4: Average share of bean output marketed across regions in season 1 and 2 in 2005 and 2009**



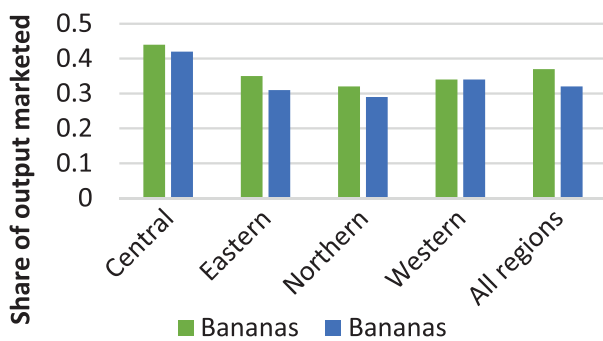
#### Bananas

The share of bananas marketed in the northern region is less than that in central, western and eastern Uganda (Figure 6). Bananas is a staple food crop for most household in central Uganda; therefore, it is not surprising that not so many households sell it to the market. However, or those households that do, they sell a higher share in all seasons compared to the other regions.

**Figure 5: Variation in market participation for Bananas across regions**



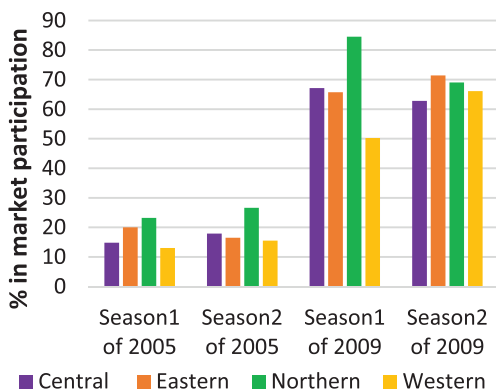
**Figure 6: Average share of banana output that is sold in season 1 and season 2 in 2005 and 2009**



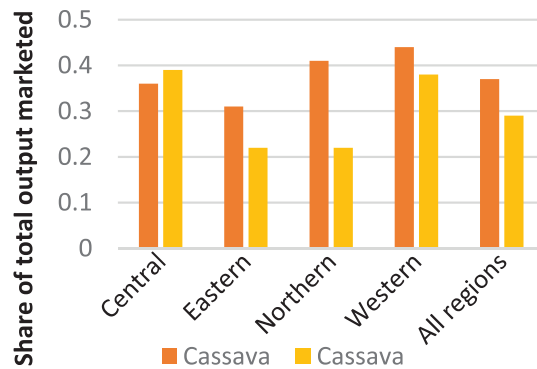
**Cassava**

The number of market participants for cassava is highest in Northern Uganda particularly in the first season of 2009 (Figure 7). In 2005 and 2009 there was a significant increase in cassava market participation across all the regions. The share of cassava that is marketed is however highest in western Uganda in the first season (Figure 8). All regions market less in the second season. In 2008, the Uganda census of Agriculture identified Apac district (Northern region) as the district with the highest production of maize<sup>5</sup>.

**Figure 7: Variation in market participation for Cassava across regions**



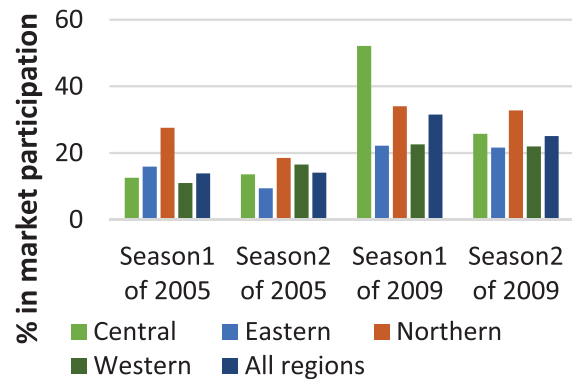
**Figure 8: Average share of cassava output that is sold in season 1 and 2 in 2005 and 2009**



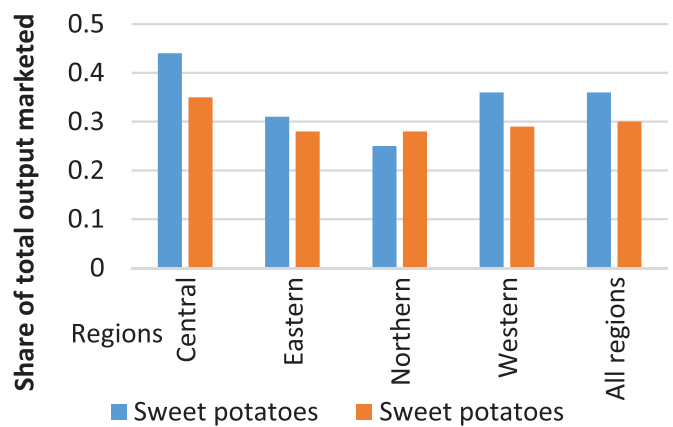
**Sweet potatoes**

Market participation and the share marketed of sweet potatoes is highest in central Uganda in both seasons followed by western Uganda (Figure 10 and 11).

**Figure 9: Variation in market participation for sweet potatoes across regions**



**Figure 10: Average share of sweet potatoe output that is sold in season 1 and season 2 in 2005 and 2009**



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**Differences in market participation between Central Uganda and other regions**

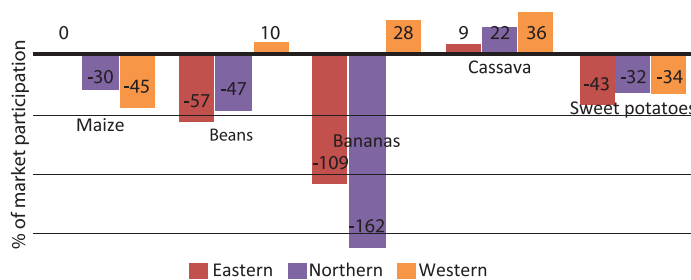
Figure 12 shows the differences in market participation (of maize, beans, bananas, cassava and sweet potatoes) between central Uganda and other regions when other factors that affect the decision of households to participate in the market are taken into consideration. From Table 1, central Uganda has superiority in the marketing of sweet potatoes compared to other regions. It also has superiority over eastern and northern Uganda in the marketing of beans and bananas. Households in central Uganda are more than hundred percent more likely to participate in marketing bananas than households in Northern or eastern Uganda.

Ideally because bananas is a staple food in central Uganda, it is plausible that the households will keep most of what they grow for subsistence purposes. But the fact that bananas are marketed more in the central region than the northern and eastern regions implies that production of the crop is relatively high in central region to meet both subsistence and market needs. There is more production and market participation of bananas in western Uganda. Northern

and Eastern Uganda surpass central Uganda in the marketing of cassava. Households in northern Uganda are 22 percent more likely to participate in marketing cassava than their counterparts in central Uganda.

**Implications for policy**

From the above discussion, there is no similarity in the crops that farmers decide to sell to the market in the different regions. Commercial production of cassava is viable in northern Uganda while commercial production of bananas is viable in western Uganda. For maize, commercial production is viable in eastern and central Uganda while for sweet potatoes commercial production is viable in central Uganda. The findings of this study are in tandem with MAAIF’s agriculture development focus of specific crops to specific agricultural zones (commodity focused approach). For example for 2010/2011 MAAIF identified cassava as the specific crop to be targeted for development in the North Eastern, maize for eastern and some districts in central region and bananas for south western Uganda. It is crucial for the government to fast track the implementation of the commodity approach in the commercialization drive.



**Endnotes**

- 1 Ministry of Agriculture Animal Industry and Fisheries (MAAIF). (2010). “Agriculture for Food and Income security”. Agriculture Sector Development Strategy and Investment Plan: 2011-2014/15
- 2 Ministry of Agriculture Animal Industry and Fisheries (MAAIF). (2010). “Agriculture for Food and Income security”. Agriculture Sector Development Strategy and Investment Plan: 2011-2014/15

- 3 Government of Uganda (2004). Increasing incomes through exports: A plan for Zonal Agricultural Production, Agro-processing and Marketing.
- 4 Ministry of Agriculture, Animal Industry and Fisheries Statistical Abstract 2011
- 5 Ministry of Agriculture, Animal Industry and Fisheries Statistical Abstract 2011

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