

Research Application Summary

**Analysing legume market chains to enhance livelihoods and environmental systems within maize-based farming systems in Malawi**

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**Abstract**

This paper analyzes the marketing of legumes in Malawi with special focus on the seed supply chain, the actors, activities, and the business environment that the commodity goes through as it moves from producers to buyers and consumers. The study found that vendors/private traders usually came from major cities to buy produce in small lots from farmers and mainly used hanging scales. Prices were found to be variable within season and between buyers. Analysis of the seed supply systems indicated that there was mostly informal seed system where farmers either used own-saved seed or seed exchanges.

Key words: Malawi, marketing of legumes, seed system

**Résumé**

Cet article analyse la vente des légumineuses au Malawi avec une focalisation spéciale sur la chaîne d'approvisionnement en graines, les acteurs, les activités et l'environnement d'affaires que le produit subit pendant qu'il passe des producteurs aux acheteurs et aux consommateurs. L'étude a constaté que les fournisseurs/commerçants privés sont habituellement venus des villes principales pour acheter le produit dans de petites ventes aux enchères des agriculteurs et ont principalement employé les balances accrochables. Des prix sont avérés variables dans la saison et entre les acheteurs. L'analyse des systèmes d'approvisionnement en graines a indiqué qu'il y avait la plupart du temps un système informel d'approvisionnement en graines où des agriculteurs utilisent soit les graines proprement-gardées, soit les échanges de graines.

Mots clés: Malawi, vente des légumineuses, système de graines

**Background**

Accelerated agricultural growth is a fundamental pre-requisite for rapid reduction of poverty. However, reducing poverty and increasing food security will require intensification and

diversification of the region's cereal-based farming systems to include strategic high-value crops such as legumes that contribute to improved soil fertility, sustained productivity, income growth, and environmental service functions. The objective of the research was to analyze the marketing of legumes in Malawi with special focus on the seed supply chain, the actors, activities, costs and the business environment that the commodity goes through as it moves from producers to target buyers and consumers.

### Literature Summary

Functioning markets are crucial for especially small scale farmers who constitute much of the population of Malawi. Small-scale farmers need access to markets to purchase agricultural inputs, such as seeds and fertilizers and to sell their crops (Owns, 1997). They also rely on markets to ensure that they have enough food. Market reforms and trade liberalization have been key instruments of governments across Sub-Saharan Africa (SSA), Malawi inclusive, in restructuring their economies. Over the past two decades, governments have withdrawn support for state-subsidized marketing companies, dramatically reduced input and output marketing subsidies and relaxed regulatory restrictions on private trade (Ng'ong'ola *et al.*, 1997). However, the impact of the market reforms on the welfare and food security of farmers have not been fully understood though studies have shown that seeds and fertilizer are more available now, but credit is still mostly inaccessible to small-scale farmers. While the majority of farmers feel that seed availability has improved, only 10% of the input purchases are on credit. Moreover, not many farmers are able to access improved varieties of legume seed from their local markets. This calls for a detailed study to understand the market processes for legume seed in Malawi and make recommendations on how it can be improved.

### Study Description

The study was undertaken in mid February to early March 2009 and involved all the four Extension Planning Areas (EPAs) plus other trading points in Zomba District. These EPAs were the ones currently hosting the Integrated Soil Fertility Management (ISFM) learning centres. The team used a combination of Rapid Market Appraisal methodology whereby a check list for interviews was developed for producers (farmers), traders and processors. Informal interviews were also conducted with key informants (processors and exporters, researchers) and a few other actors (local and urban based traders and processors and farmers in focus group discussions). The team conducted interviews with relevant stakeholders in the groundnuts, pigeon

peas, phaseolus beans and soya sub - sector (farmers and traders/vendors). A team of five people were involved which included student researchers from Bunda College of Agriculture and field staff from the Ministry of Agriculture. Data analysis was conducted using Microsoft Access and SPSS where cross tabulations, frequencies and means were calculated for reporting.

## **Findings**

The study found that vendors/Private traders usually came from major cities to buy produce in small lots and mainly used hanging scales. Prices were found to be variable within season and between buyers. During the period of the study, the buying prices ranged from K98.89 per kilogram for pigeon peas, K159.50 per kilogram for soybeans, K145.50 per kilogram for beans for most vendors and other private traders (1 US\$ = 140 Kwacha). Selling prices ranged from K209 for soybeans, K156 for pigeon peas and K211 per kg for beans. There were certain dynamics related to price fluctuations within the market chain. Fluctuation in prices was mostly due to seasonal nature of the crops, being low at harvest (April/May) and high at planting time (November/December). The prices were found to depend much on whether it was a good crop season or not. Analysis of the seed supply systems indicated that there were mostly informal seed system where farmers either used own-saved seed or seed exchanges, and at other times they bought seed from the local markets for their legume production. There were no improved seed varieties of groundnuts/pigeon peas sold through input stockiest. The major formal seed suppliers were through research institution mainly ICRISAT.

## **Research Application**

There is high potential of improving yield of grain legumes in Malawi. Technical support is available from Ministry of Agriculture and other NGOs working in the districts which farmers can tap into to improve their yields. Farmers have not realized much from marketing of their legume crops in the past due to working in isolation (on individual basis). With the introduction of agro-enterprise development concept and collective marketing concept, farmers could be encouraged to work in groups thereby strengthening their bargaining power and improve profit. Also, with the introduction and promotion of farming as a business concept, farmers can be able to calculate production costs as well as determine prices to sell the product in the market.

Mean (MK)

Figure 1. Buying and selling Prices of different legumes

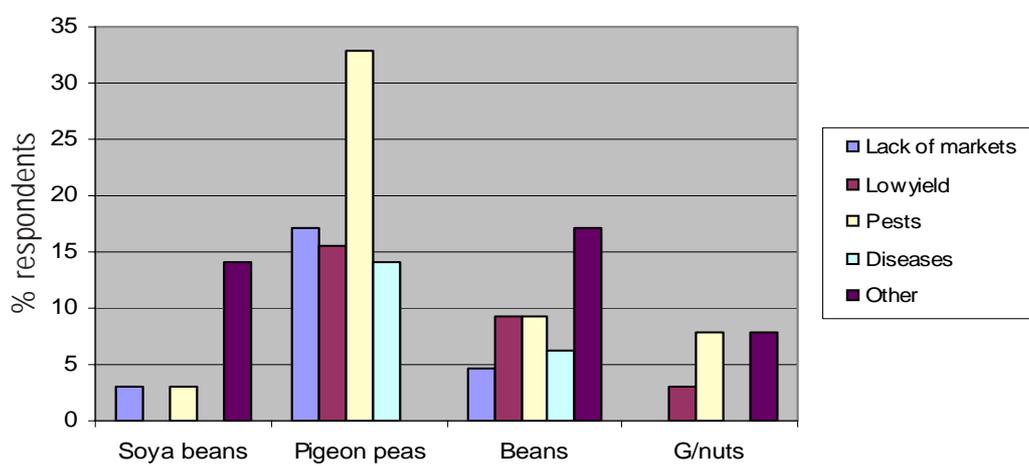
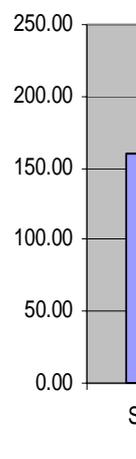


Figure 2. Production and marketing problems.

**Recommendation**

The study showed that though ground nuts were allocated the least portion of land, it was the most profitable commodity to producers. It had the least production costs and fewer problems of low yields, pest attacks and other production problems. Though it was profitable to producers, traders found it a low paying enterprise due to high costs when purchasing, high costs of transportation but low selling prices to the consumers. Traders also found it less profitable to trade in legumes due to the high purchasing costs but low selling prices. Most of those interviewed indicated that they used public transport. The use of public transport was unreliable as traders sometimes failed to deliver the goods in time. Farmers understanding of market dynamics and adherence to good cultural practices will assist to increase production and incomes. These include; improved agronomic practices, conducting gross margin analyses,



conducting market surveys and sub-sector analyses, post harvest handling as well as value addition.

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