

Informal and unstructured market opportunities for groundnut value chain development in the Central region of Malawi

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Key Messages

- We interviewed 444 groundnut farmers and 160 groundnut traders in central Malawi to assess farmer market access and marketing practices for an increasingly important crop for Malawi's agricultural diversification objectives.
- Farmers and traders obtain higher groundnut prices when their groundnut is shelled and graded, but fewer farmers than traders shell and grade their groundnuts.
- Informal groundnut marketing channels are functioning well in our study area suggesting that imposing excessively restrictive regulations on these markets could impede their growth and inhibit their potential for further development.
- Agricultural extension efforts to educate farmers about the benefits of enhancing groundnut quality could improve their abilities to deliver higher quality while increasing farm revenues.
- Promoting shelling service provision could help farmers benefit from higher premiums for shelled groundnuts, although it comes with increased aflatoxin risks, necessitating the need for shelling facility designs to address these risks.

Introduction

Groundnut is an important cash and food crop in Malawi, contributing to the diversification away from maize and tobacco-reliant production systems, enhancing food security, and foreign currency generation. According to production data, farmers have demonstrated a notable response to the expanding market for groundnuts. Over the past decade, there has been a substantial increase in both production volumes and area under production dedicated to groundnut cultivation. Specifically, between 2011/12 and 2021/22

seasons production has increased by 22% from 353,190 tonnes to 431,881 tonnes while the area allocated to groundnut farming has witnessed a remarkable increase of 118% from 368,081 ha to 434,761.6 ha¹.

Despite the potential and recent growth, a prominent question about further development of the groundnut sector (and continued diversification away from tobacco and maize) centers on limited access to profitable and structured markets². Most smallholder farmers operate in unstructured

markets that lack regulations, resulting in limited control over quality standards and pricing mechanisms due to uncertain quality and information asymmetry. These markets involve numerous small-scale buyers and sellers with limited access to market information.

Using primary data collected from farmers and traders in the Central region of Malawi the study assesses the dynamics of groundnut markets, including their market strategies, competition levels, and the impact on groundnut pricing, marketing margins, and quality. Findings from the study contribute to a comprehensive understanding of groundnut informal market dynamics, which is useful for informing interventions to improve market efficiency and identify opportunities for value addition and market development in the groundnut sector.

Data

The study uses data from a Groundnut survey conducted by the MwAPATA Institute in 2022 in Lilongwe and Kasungu Agricultural Development Divisions (ADDs)- the largest production areas for groundnuts in Malawi. Nine EPAs were randomly selected namely Bembeke, Chileka, Nthondo, Manjawira, Mvera, Chipala, Chulu, Chiosya, and Mkanda EPAs from which a total of 444 smallholder farmers and 160 traders were interviewed.

Table 1: Summary characteristics of smallholder farmers (N=444) and traders (N=160)

Variable	Farmers	Traders
Male (i)	0.80	0.87
Age	45.34	35.16
Household size	4.94	n/a
Years of schooling attended	5.62	9.11

Highest qualification attained(i)		
None	0.76	0.41
Completed primary school	0.13	0.12
Junior Certificate of Education	0.07	0.21
Malawi School Certificate of	0.04	0.27
Experience (years)	6.14	6.07
Registered business	n/a	0.29
Trader type		
Small mobile trader (no permanent	n/a	0.27
Permanent shop trader	n/a	0.71
Container trader located at fixed	n/a	0.03

(i) Data for farmers are for household head.

Source: Computed from survey data

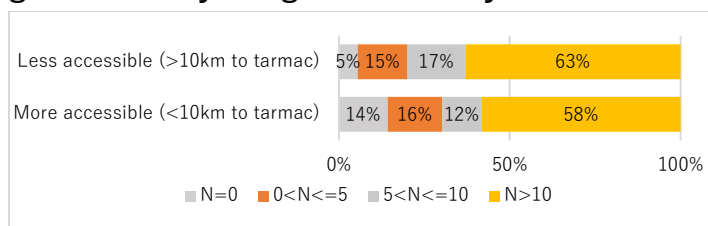
The survey collected information on farmer groundnut marketing details such as the number of separate traders/buyers who come to villages to buy groundnut, where the sales take place, whether the farmers sorted or graded or select your groundnuts prior to selling, distance or travel time to markets, buyer type, what form was the groundnut sold, quantities sold and prices. For traders, we collected detailed information on their types, location of markets, quantity traded, where the groundnuts are bought and sold, relationship with farmers, whether traders offer different buying prices based on different groundnut quality, how prices are determined, and services offered to farmers.

Farmer market access and groundnut sales

Market access is not a significant challenge in our study area. All villages had at least one sampled farmer that sold groundnuts, and 90% of all farmers (including those not selling) reported having access to multiple groundnut buyers. Most farmers, even the subset of those living in less accessible villages (defined as great than 10km from tarmac), reported that at least 10 groundnut

buyers come to their villages (Figure 1). Only a small proportion of farmers stated that there were no buyers visiting their villages. Interestingly, this share is higher for the more accessible farmers, likely because the villages are so close to markets that they simply transport themselves with no need for traders to come directly to them. Seventy-five percent of all farmers reported that at least one farmer in their village transported groundnuts to a market to sell.

Figure 1: Shares of farmers who reported number of traders coming to village to buy groundnuts by village accessibility



Source: Computed from survey data

Most groundnut farmers – in both more and less accessible villages – sold groundnuts (Table 2). Typically, farmers sold their groundnuts in a single sale occasion – only 22% of those selling had more than one sale occasion. Informal traders are an essential cog in groundnut markets. More than 90% of farmer groundnut sales were to traders and most sales happened at the farmgate. Data shows that there is a wide divide between more and less accessible villages with 91% of groundnut sales happening at the farmgate in less accessible villages, compared to 67% in more accessible villages. Still, farmer relationships with traders are not strong. Less than 10% of farmers selling report

having an established repeated relationship with a trader.

Table 2: Shares of groundnut farmer marketing practices by village accessibility

Description	More accessible (<10km to tarmac)	Less accessible (>10km to tarmac)
Share of farmers selling groundnuts	0.69	0.67
<i>Sales information, conditional on selling</i>		
Share selling to trader or broker	0.93	0.97
Share selling at the farmgate	0.67	0.91
Share selling in a market	0.40	0.14
Share with established relationship to buyer	0.09	0.08
Share selling in more than one transaction/time	0.22	0.21

Source: Computed from survey data

Groundnut trader marketing

Our trader survey data reveals a high degree of competition in markets. Traders report an average of more than 30 other groundnut traders that are active in their respective markets. The two main types of traders interviewed include mobile traders and those with fixed shop locations. Fixed shops have more purchases from farmers, but similar number of sales occasions, indicating their key role in aggregating groundnut volumes (Table 3). Fixed shop traders are also more likely to purchase from other traders, though both types purchase from both farmers and traders at high prices. Fixed shops are more likely to sell inputs to farmers (10%) and mobile traders are more likely to share advice and information to farmers (12%). However, overall, there is limited provision of services to farmers from traders, and no traders provided credit to farmers for production. On the sales side,

traders predominantly sell to other traders. Fixed shops are more likely to sell to processors and slightly more likely to sell to exporters.

Table 3: Groundnut trader marketing practices by type of trader

Description	Mobile traders	Fixed shop traders
Groundnut buying		
Number of farmers purchased from in last week	7.9	18.3
<i>Share buying groundnuts from different sources</i>		
Farmers	0.93	0.92
Traders or brokers	0.60	0.74
<i>Share providing other services to farmers</i>		
Fixed price	0.02	0.03
Inputs	0.05	0.10
Contract sales	0.00	0.02
Advice/information	0.12	0.06
Share communicating to farmers by cellphone	0.60	0.61
Groundnut selling		
Number of buyers sold to in last week	14.9	14.4
<i>Share selling groundnuts to different buyers</i>		
Consumers	0.19	0.15
Traders or brokers	0.84	0.79
Processors	0.23	0.32
Exporters	0.23	0.26
<i>Share providing/receiving other services from traders</i>		
Provide credit to me	0.26	0.28
I provide credit to them	0.14	0.27
They guarantee prices	0.17	0.27
Share communicating to other traders for prices	0.69	0.73

Source: Computed from survey data

Groundnut quality and prices

Overall, traders are much more likely than farmers to sort or grade groundnuts before selling – 33% of traders grade compared to just 7% of farmers. Majority of both farmers and traders report that the price they receive when selling groundnuts varies with groundnut quality. To explore efficiencies in groundnut marketing, we compare farmgate prices

of groundnuts sold to trader prices in their nearest market. To avoid temporal biases in the analysis we restrict the observations to the most common sales month in our data – July 2022 – and we focus only on the most common variety sold – CG7/9 – to avoid varietal price differences (Table 4).

Table 4: Average groundnut farmgate prices and shelling/marketing margins, July 2022

Description	Farmgate price (MWK/kg, unshelled)	Shelling and marketing margin (MWK/kg, shelled)
All	578	338
<i>Accessibility</i>		
High (<10km)	597	322
Low (>10km)	563	350
<i>N buyers in village</i>		
High (>10)	596	312
Low (<=10)	526	409
<i>Share of traders grading groundnuts in nearest market</i>		
High (>33%)	598	358
Low (<33%)	571	332

N=86. Farmgate prices are for CG7/9 varieties, unshelled only. Marketing margins are differences between nearest market average prices for CG7/9 varieties, and include shelling transformation.

Source: Computed from survey data

We observe higher farmgate prices in villages that are (i) more accessible, (ii) have a higher number of buyers, and (iii) have a higher share of traders in their nearest market grading groundnuts before selling implying a positive impact of competition on groundnut prices. We also observe lower shelling and marketing margins for these areas, implying that farmers are able to capture a higher share of market prices. Each of these results would be expected in a well-functioning value chain.

We have relatively few observations of farmer groundnut sales when shelled. But comparisons

converting unshelled to shelled volumes and controlling for sales location and month of sale show that average prices of shelled groundnuts are 60-80% higher than unshelled after converting shelled groundnuts into shelled kgs – in the same neighborhood as the shelling and marketing margins. Thus, the transport portion of the marketing margin is likely to be small, with the majority of the margin in the transformation of unshelled groundnuts to shelled. Again, indicative of a relatively efficient marketing and transport system between farmgate and villages.

We extend our analysis by examining trader prices and margins by groundnut quality after grading. There is a small price premium for higher quality groundnuts – about 20% on average (Table 5).

Table 5: Trader quality differentiation, mean median prices and margins by quality (MWK/kg)

Description	Mean	Median
Buying price	1,416	1,500
Selling price		
High quality	1,619	1,700
Lower quality	1,354	1,500
Trader margins		
High quality	214	200
Lower quality	-48	0

Notes: N=101. Margins calculated at the trader level. Only shelled CG7/9 varieties prices used. High and low quality groundnuts were self-assigned by traders.

Source: Computed from survey data

Our data also show that higher quality groundnuts are more likely to be sold to exporters (18% compared to just 2% for lower quality), and that lower quality groundnuts are more likely to be sold to consumers (27% compared to 20% for higher quality).

Policy implications

Informal groundnut marketing channels are robust in our study area. Farmers generally have multiple marketing opportunities, both at the farmgate and at nearby markets, and trader competition is strong. Adding overly burdensome structures to these markets may hinder growth and further development of these channels. Our analysis shows that there is at least some quality premium in groundnut markets, evidenced by sorting and grading by traders, that leads to modest price-quality differential in the market. Thus, consumers and processors have a positive willingness-to-pay for higher quality, lower risk groundnuts. This is a necessary condition for upgrading groundnut practices upstream though the observed price difference is small. Increasing the quality premium, potentially through information and awareness campaigns, would increase incentives in the value chain to supply even higher quality and lower risk groundnuts. Extension efforts could better enable farmers to identify and respond to market premiums for quality nuts. Finally, there are large price premiums for shelled groundnuts (over unshelled), yet only a small minority of farmers sell shelled groundnuts. This may reflect high costs to shell manually. Encouraging shelling service providers may enable farmers to capture a higher share of the shelling premium for their groundnuts. Though there are tradeoffs as shelled groundnuts may carry higher risks of aflatoxin contamination, which should strongly factor into any design of shelling service facilities.

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