

Assessing the Market Integration of Locally Produced Groundnut in Ghana

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Introduction and Research questions

Groundnut or peanut (Arachis hypogaea linneaus) is mainly produced in the northern regions of Ghana and consumed in the South. The contribution of the crop in the diet of many poor households is immense. Price movement affect farmers willingness to produce and consumer's ability to pay, thus issues of market efficiency and whether origin and destination markets are integrated becomes pertinent.

- What are the trends for the monthly retail groundnut prices for the northern and southern regional market between 2004 and 2006?
- To what extent is the groundnut market in the northern and southern markets integrated?
- What is the typical distribution channel used in the two markets?
- What are the constraints facing traders in the groundnut market

Methodology

- Qualitative and quantitative survey data from actors in the groundnut market: wholesalers, retailers, transporters, consumers, processors and administrative authority
- Growth rate model was used to analysis the trend in the monthly real retail prices from 2004-2006
- The Ravallion model concept was used to check for spatial market integration between north and south
- Kendall's coefficient of concordance was used to check for agreement between constraints

Results: Price Trend Analysis

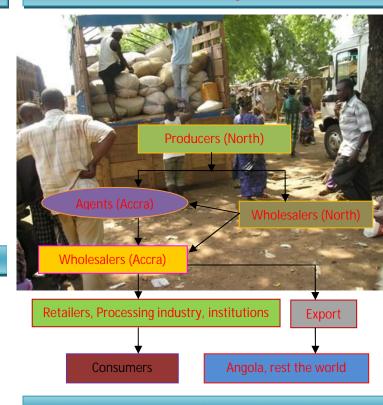
- The price trend analysis shows a perfect correlation for monthly real retail prices for north and south
- There is significant fluctuation in the monthly real retail prices for north and south and also between the years under consideration
- Growth rate model results show a significant growth in price from 1.9% to 2.9% from 2004-2006

Results: Test for Market integration

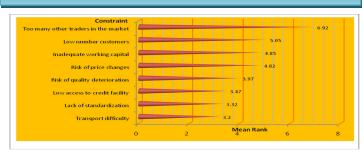
Ravallion Model Results

- The overall model is statistically significant with R value of 42% and F value of 4.011.
- Test for short run and long run market integration is significant at 1% and 5% significance level with F value of 48.301 and 4.058 respectively.
 - Groundnut market is not integrated
- Model results show that prices are not transmitted immediately or in the long run between the north and south central markets.
- Some identified reasons are poor road network between the north and south markets, poor information and communication technology etc.

Results: Distribution Channel of the groundnut in Ghana



Results: Constraints affecting the groundnut market







Conclusion and Recommendation

- The groundnut market just like many other commodity markets in Ghana is not integrated both in the short and long run.
- The distribution channel is large and thus increases the transaction cost of groundnut transferred to final consumer.
- Market actors are affected by constraints relating to poor infrastructure.
- Market structures should be improved to compensate producers adequately and also improve poor household access to groundnut.