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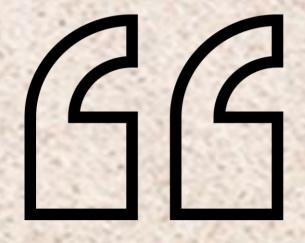


# Do Unique Farmer Trader Relations Enhance Resilience: Case of Green gram Markets in Mbeere County, Kenya.

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## **ABSTRACT**



This study sought to contribute to a better understanding of market dynamics of green grams (Vigna radiata) as a traditional crop within a resource poor producer community in Mbeere South sub-County, Kenya. The study aimed to characterize the green gram marketing channels and to evaluate the factors that influence the choice of green gram marketing channel by the producers. Further the study sought to assess farmer-trader relationships that enhance resilience. A multinomial logit model was estimated through data from households growing green grams.

Results show that 70 percent of farmers in the study site grew green grams. On average, each household has 1 to 2 acres of land under green grams production each year. Farmers used three marketing channels, rural retailers (58 percent), wholesalers (14 percent) and assemblers (26 percent). The multinomial results showed that age of the farmer (p = 0.06), access to credit (p = 0.065), price of green grams (p = 0.079), and selling as individuals (p = 0.000) positively influenced the choice of rural assembler marketing channel. Gender of the household head (p = 0.001), production cost (p = 0.000) and use of mobile phone to access marketing information (p = 0.019) positively influenced the probability of choosing rural retailer over wholesaler marketing channel. In conclusion, farmers prefer marketing channels where they incur low production and transport costs and that offer higher prices to maximize profits. The study also shows farmers prefer selling to traders where they have repeat visits and establish trust. The study recommended first, identification and prioritization of unique farmer-trader relations that enhance adaptive resilience and increase farmers marketing options. Secondly, interventions to enhance market-based signals e.g. price should be reinforced.

# AIMS AND OBJECTIVES

#### The objective of this study were:

- 1. To Characterize green gram marketing channels
- 2. To assess factors that influence choice of green gram marketing channels by producers
- 3. To assess whether unique farmer- trader relations enhance resilience



Caption 1. Project meeting with farmers in Mbeere South, sub-county on green gram marketing

## **METHODOLOGY**

#### Study area

This study was carried out in Mbeere South sub-County. The sub-County is classified as semi-arid with low and erratic rainfall. It is therefore mainly suitable for drought-tolerant crops such as green grams, cowpeas, millet and sorghum.

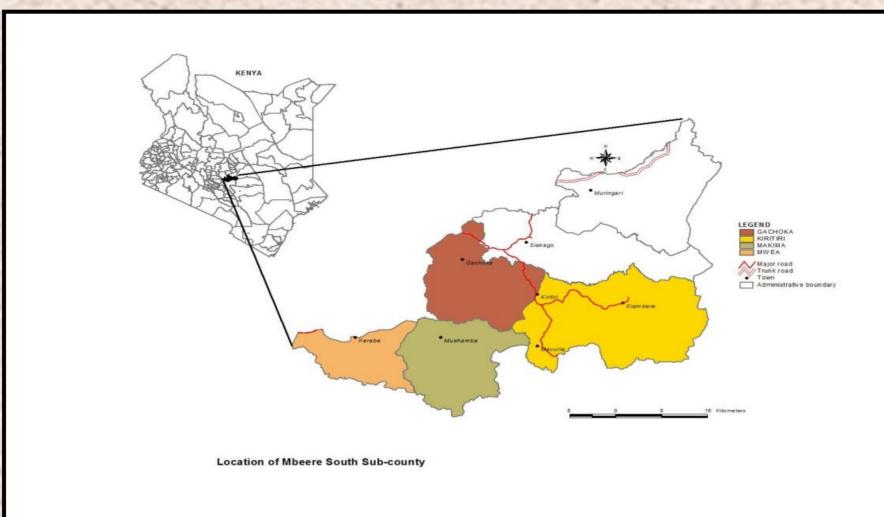


Figure 1. Study site- Mbeere South sub-County, Kenya

## Sampling

Two hundred and sixty two households were randomly selected from a sampling frame involving 800 hundred farmers in four divisions of Mbeere South sub-County.

A focus group discussion (FGD) was held with both men and women. A household survey was later conducted using a semi-structured questionnaire

#### Conceptual framework

To assess whether unique farmer -trader relations enhance resilience both institutional, socio-economic and farm level characteristics were assessed.

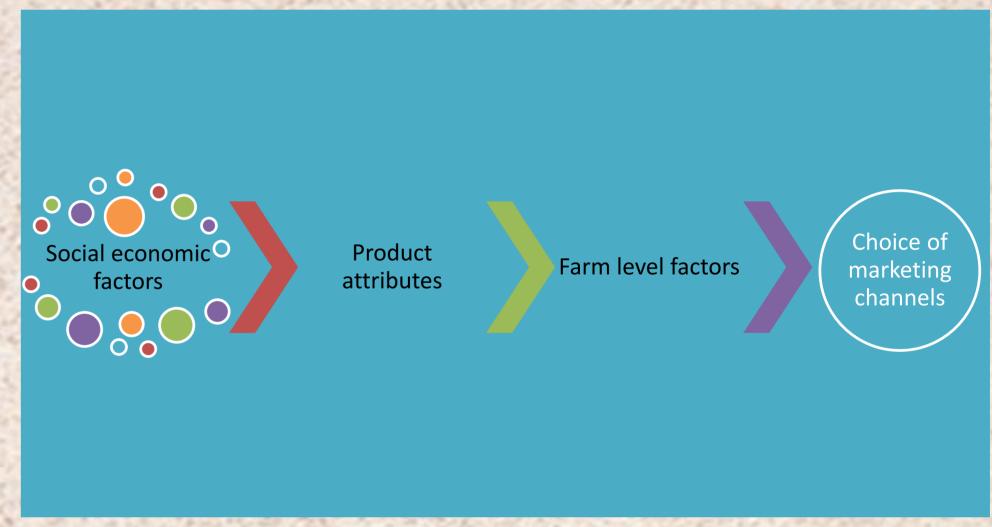


Figure 2. Conceptual framework

## Data analysis

Descriptive statistics were assessed to characterize farmers in the study area. Further ANOVA analysis were done to show differences in social economic characteristics for farmers choosing various marketing channels.

A multinomial logit (MNL) was fitted to assess factors that influenced farmers' choice of various marketing channels.

## **RESULTS**

## Marketing channels

The study found three main green gram marketing channels in Mbeere sub-County. These were;

- (a) direct sales to wholesalers(14.6%),
- (b) direct sales to rural retailers (58.2%) (c) direct sales to rural assemblers (26.9).

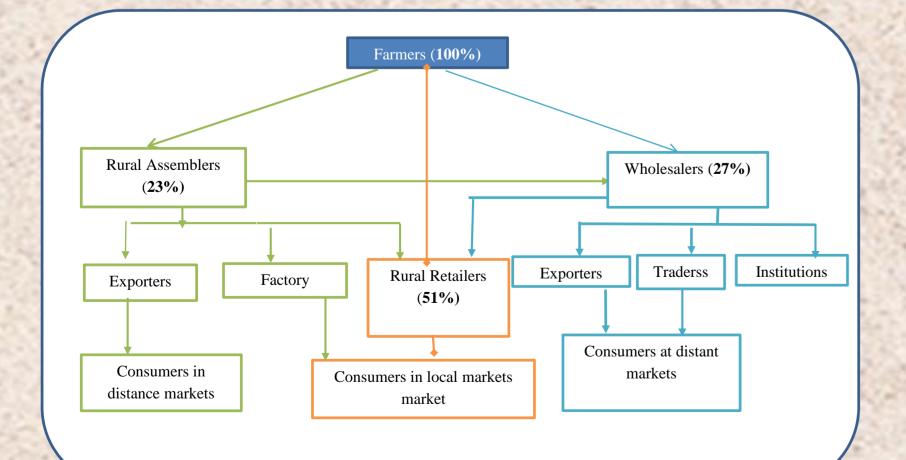


Figure 3. Green gram marketing channels in Mbeere South

On average, the mean age for farmers in the study site was 39.23 years with an average 9 years of education.

Farmers selling to rural retailer marketing channel received the highest sales prices at KES 4,500 per 90 kg bag, compared to KES 4,400 and KES 4,162 for rural assembler and wholesalers respectively. Selling to rural retailers gave the highest margins at KES 1,140. The margins for selling through rural assemblers and wholesalers were key, 400 and 1,075, respectively.

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## A. Repeat visit and farmers age

- Older farmers preferred assembler marketing channel which was closer to farmers' homes.
- Farmers who had repeat visits preferred selling to rural assemblers relative to wholesaler marketing channels.

## B. Green Variety

 Farmers who sold the local green gram variety (more drought and disease resistant) preferred assembler marketing channels compared to wholesaler marketing channel.

## C. Use of mobile phones

Farmers who used mobile phones to access marketing information preferred the rural retailer marketing channel.

## D. Price and gender

- Farmers preferred the rural retailer marketing channel, which offered higher prices compared to the wholesaler marketing channel.
- The study also show significant gender differences in choice of marketing channels with being male oriented to more profitable (retailer) channels while being female oriented to more bulkoriented (wholesaler) channels.



Caption 2. Trader selling green grams and other cereals

## Discussion

'Farmers are attracted to a particular marketing channel based on a mix of personal and socio-economic attributes and other marketing-enabling factors. Farmers in the arid and semi-arid areas of Kenya not only face market penetration barriers but are also faced by other factors like access, poverty, inefficient production systems, and fragile ecosystems. Therefore, interventions aimed at enhancing farmers' market access should consider these varied dimensions.

The study found that older farmers, who were more resource constrained preferred selling to assembler marketing channels. This traders were closer to farmers homes and did not have a limit to the quantity of green grams they bought from farmers.

Farmers who were less resource constrained and used a mobile phone to access market information preferred the rural retailer marketing channels. More male heeded households also preferred this channel.

## CONCLUSIONS

A: older farmers prefer selling to traders where they have repeated visits and established trust

Recommendation: identification and prioritization of unique farmertrader relations that enhance adaptive resilience and increase farmers marketing options..

B: resource constrained farmers prefer traders who accept both the local and improved variety. As compared to those who only want improved variety

Recommendation: market based signals e.g. demand of more resistant varieties and price should be enhanced to enhance resilience both at farmer level and ensure food availability.