

## PROBLEMS OF GUINEA CORN MARKETING IN NASARAWA STATE, NIGERIA

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**Abstract:** The study examines the problems of sorghum marketing in Nasarawa State. Structured questionnaire was used to collect data during the 2013 farming season from two hundred and forty food marketers across six local government areas of the state. The descriptive statistics were used to analyze and describe the data collected while the Kohls (1985) formula was used to determine the estimates of market margins and marketing efficiency was calculated using Olukosi and Isitor (1990) formulae. The results indicate that the average farm gate price of guinea corn was N10 000 per 100 kg bag. The average marketing cost was N1, 100 per bag and average net marketing margin was N1, 233.3 per bag. The average marketing efficiency was 106.5 .The major problems confronting guinea corn marketing; transportation problem, inadequate market infrastructure, inadequate funding, and shortage of processing facilities, seasonality and perishability of food produce and ethnic crisis. To improve guinea corn marketing in the study area it is recommended that adequate transportation facilities should be provided by government, private individuals and corporate groups; research into post-harvest storage and processing techniques should be intensified; and funds should be made available to food marketers so that they can take advantage of bulk purchasing, market expansion and post-harvest processing.

**Keywords:** Food marketing, market efficiency, market margin and Nigeria.

### 1.0 Introduction

According to Ivgababon (2005), in Adegboye, 2004, agriculture is an important sector in the Nigerian economy. It contributes about 40-42.1% of the total GDP, employs about 70% of the labour force, accounts for 70% of the non-oil exports and perhaps most important provides over 80% of food needs of the country. During the post- independent era agriculture was at subsistence but at self-sufficient level, but a decade after, opened the way for food shortages as a result of declining production. The food shortages is not peculiar to Nigeria, but is attracting global attention as millions particularly in developing countries do not have enough food to meet their basic needs. Millions more are also experiencing hunger, malnutrition, growth retardation and sometimes death due to starvation. According to Idachaba (2004), food insecurity could be caused by both supply-side factors and demand-side factors. One of the supply-side factors of food insecurity he identified is food-marketing

problem. He argued that that the dwindling agricultural production in Nigeria is a confirmation of the unattractiveness of agriculture as a result low returns and compensation being paid to farmers, which tend to discourage increased production. The food marketing problems becomes glaring when farmers who are the primary producers could not get their produce to the market at the right time because most of them reside in the rural areas and are not given better returns for their efforts.

This study was carried out in six local government areas of Nasarawa state. According to Rahman (2007), agriculture is the main economic activity in the state. The state is endowed with fertile agricultural land, rivers and streams that is suitable for the production of crops such as guinea corn, groundnut, cassava, yam, rice, maize, cowpeas, okra, melon, vegetables and perennial crops such as guava, mangoes, cashew, oranges etc. The method of agricultural production is largely traditional, small in scale and relying on manual human labour equipped with hoes, cutlasses and machetes.

## 2.0 Methodology

The major data source for this study was primary. Data were obtained through a survey of food marketers using a structured questionnaire. Multi-stage random sampling techniques were used to select 240 food marketers during the 2013 cropping season. Two Local Government Areas were randomly selected in each of the three Senatorial Districts Of the state. In each Local Government Area two major terminals for produce markets were identified and selected, which serves as meeting points of middlemen, buyers and farmers. 40 food marketers were randomly selected in each Local Government Area totally 240 respondents. Data collected covered marketing margin and marketing efficiency and food marketing problems. Descriptive statistics were used in analyzing the data collected while the Kohls (1985) formula was used to determine the estimates of market margins. According to Kohls (1985), marketing margins equals the difference between what the consumer pays and the farm gate price per unit of the food produce, while net margin is the difference between market margin and market costs. Market cost is the sum of transport cost, storage cost, labour cost and other costs. Marketing efficiency was calculated using the formula given by Olukosi et al (1990). The formula specified that:

$$\text{Market efficiency} = \frac{\text{Value added by marketing activities}}{\text{Marketing costs}} \times 100\%$$

In other words,

$$\text{Market efficiency} = \frac{\text{Net Margin}}{\text{Marketing costs}} \times 100\%$$

To calculate market margin and marketing efficiency, the average prices of sorghum was used as given by the respondents in the various markets. This was based on the naira per bag of sorghum during the 2013 cropping season.

### 3.0 Results and Discussion

**Table 1:** Marketing margin and marketing efficiency in selected local government areas of Nasarawa state, 2013 cropping in season

Local Market Government	Farm gate price #/bag	Selling price#/bag	Market cost#/bag	Market margin#/bag	Net #/bag	margin eff#/bag
Akwanga	10,000	12,000	1,100	2,000	900	82
N/Eggon	10,000	12,000	1,100	2,000	900	82
Keffi	10,000	13,000	1,200	3,000	1,800	150
Nasarawa	10,000	13,000	1,200	3,000	1,800	150
Lafia	10,000	13,000	1,200	3,000	1,800	150
Doma	10,000	11,000	800	1,000	200	25
Average	10,000	3333.3	1,100	2333.3	1233.3	106.5

**Source:** Field survey, 2013

Table 1 shows the marketing margin and marketing efficiency in Nasarawa state. The table shows that the average farm gate price of sorghum was ₦10,000/bag, while the selling price per bag was ₦3333.3. The average marketing cost was ₦1100/bag and the market margin ₦/bag was 2333.3. The average net marketing margin in the study was ₦1233.3/bag while the market efficiency was ₦106.5/bag. The highest net marketing margin of ₦1800/bag were recorded in Lafia, Keffi and Nasarawa local government areas and lowest net marketing of ₦200/bag was recorded in Doma local government area, with marketing efficiency range from ₦25/bag in Doma to ₦150/bag in Lafia, Keffi and Nasarawa local government areas. The highest market margin of ₦3,000/bag were recorded for Keffi, Nasarawa and Keffi local government areas, while the lowest (1,000 ₦/bag) was in Doma local government area.

### 3.1 Problems of Food Marketing

Table 2 shows the problems of food marketing in the study area. Since multiple responses were given by respondents, the problems are ranked according to percentages of respondents who mentioned them.

**Table 2:** Problems of food marketing

Problems of marketing	No of respondents	Percentage
Transportation problems	173	72.0
Inadequate marketing infrastructure	141	58.7
Inadequate funds for food marketing	126	52.5
Poor storage facilities	95	39.5
Seasonality and perishability of food produce	200	83.3
Lack of uniform measure etc	43	17.9
Ethnic crisis in parts of the state	200	83.3

**Source:** Field survey, 2013

### 3.2 Transportation problems

The major (72.0%) problem identified in the study area was transportation. This is because transport facilities are grossly inadequate, especially in the rural areas who are the major producers of food. Motorable roads are lacking and where available, they are not motorable throughout the year or are laced with potholes, which make it difficult for vehicles to get to the farm sites and convey farm produce to the markets. The bad roads have increase post harvest losses through damage to farm produce.

### 3.3 Inadequate Infrastructures

Table 2 also reveals that inadequate infrastructures are another problem that affects food marketing in the study area. Infrastructures such as storage and warehousing are lacking in most food markets. Insufficient storage facilities often lead to produce loss due to premature germination, fungal and bacterial attack, insects and rodents attack. This often led to increase marketing cost leading to higher retail prices and reduce marketing efficiency. Market information is also lacking. Sellers and buyers are not well informed about the sources of food supply and thereby reducing potential efficiency in the market. Other facilities such clean environment, communication facilities, health facilities, fire services, banking facilities, security facilities, water supply and good toilets are also lacking in most markets.

### 3.4 Shortage of funds

Adequate fund is required in the area of bulk purchases, development of storage facilities, transport and processing facilities. Sometimes prospective food marketers are often discouraged because of shortage of funds. Most respondents (52.5%) identified shortage of funds as a problem affecting food marketing.

### **3.5 Shortage of processing facilities**

Processing is an important marketing function through which value is added to the food produce. Modern facilities for handling, packaging, grading and processing are lacking. Manual threshing of grains can cause the breakage of the grains making susceptible to fungal and bacteria attacks. Absence of these facilities sometimes compel farmers to sale perishable crops such mangoes, tomatoes, orange, pineapple and bananas at low prices immediately after harvest to avoid post-harvest losses. This depresses the income of farmers, reducing his purchasing power and a result if food insecurity.

### **3.6 Seasonality and perishability of agricultural products**

Table 2 further reveals that 83.3% of the respondents identified seasonality and perishability as one of the problems of food marketing in the study area. The seasonal pattern of production and the perishable nature of food crops create a lot of problems. This is because the seasonal pattern creates surpluses during harvest which must be sold at low prices, or stored (if storage facilities are available) for future sale at great costs. The problems is worsened by long chain of distributors, absence of uniform unit of measurement, small market size and high risk of road accident and armed robbery in the study area.

### **3.7 Ethnic crisis**

Incessant ethnic crisis between various ethnic groups in the study area is another major problem affecting food marketing in Nasarawa state. 83.3% of respondents identifying ethnic crisis as a major cause, thereby preventing traders from moving about.

### **4.0 Conclusion and Recommendations**

This study examines sorghum marketing problems in Nasarawa state, Nigeria. The results of the study show that the average farm gate price of sorghum was ₦10,000/bag in the study area, while the average marketing cost was ₦1100/bag and the highest net marketing margin of ₦1800/bag were recorded in Lafia, Keffi and Nasarawa local government areas and lowest net marketing of ₦200/bag was recorded in Doma local government area. The average net marketing margin in the study was ₦1233.3/bag, while marketing efficiency range from 25% in Doma to 150% in Lafia, Keffi and Nasarawa local government areas. Problems that hinder food marketing in the study area are poor transportation, inadequate market infrastructure, shortage of funds, shortage of processing facilities, seasonality and perishability of food produce and lack of uniform measure, long chain of distributors etc. So

to improve sorghum marketing so as to increase food production in Nigeria and the study area in particular, it is recommended that:

1. There is the need for the provision of adequate transportation facilities.
2. There is also the need for the provision of basic market facilities such as storage facilities, health facilities, and communication facilities, banking facilities, water supply, fire service and security services. These facilities could be provided either by market associations, individuals or non-governmental organizations.
3. There is the need for food marketers to form market associations and market cooperative societies so that they can pool resources together and obtain credit from banks and financial institutions for bulk purchasing and marketing.
4. There should be increase investment in post-harvest technology research and development.

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