



ECONOMICS OF COTTON MARKETING IN ZAMFARA STATE, NIGERIA

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ABSTRACT

The study analyzed the economics of cotton marketing in Gusau local government area of Zamfara State, Nigeria. Data were collected from 80 cotton marketers using random sampling techniques. Descriptive statistics and gross margin were the analytical tools used. The result revealed that (31.2%) of the respondents were within the age of 31-40 years. Most (93.7%) of the respondents were males. The results further revealed that more than half (63.75%) of the respondents were married and had family size (43.7%) of 3-9 persons. The results indicated that about 45% of the respondents had non-formal education and 58.7% had 16 and above years of marketing experience. The results also revealed that cotton marketing in the study area was profitable with an attractive gross margin of ₦9,465 and marketers enjoyed a profit of ₦1.04 per Naira invested. However, cotton marketers were faced several constraints in their marketing activities; notable among them were price fluctuation, inadequate storage facilities and transportation costs. The study recommended that cotton marketers in the study area should form cooperative union which will help them stabilize and regulate the marketing activities and help them access adequate storages facilities that will reduce losses due deterioration and damage.

Keywords: Economics, Cotton, Marketing, Gross margin, Naira invested.

INTRODUCTION

Cotton has relatively long history in Nigeria dating back to many centuries before the advent of Europeans. The crop has been traditionally associated with weaving and spinning industries. It is a major cash crop grown mainly in the northern states of Nigeria; it provides employment and raw materials for textile industries and up till the



late seventies contributed substantially to foreign exchange earnings for the country. The cotton growing areas in Nigeria are grouped into three zones, namely; Kaduna zone, producing about 60-65% consisting of Kano, Kaduna, Katsina, Kebbi, Jigawa, Plateau and Sokoto States. The eastern cotton zone is made up of Bauchi, Taraba and Adamawa states producing about 30-35%. Thirdly, the southern zone producing less than 5% of the total cotton production in the country is made up of areas of Benue, Kogi, Kwara and Niger States. Length of the rainy season varies within the zones, with the northern zone having 120 rainy days, the eastern zone having 150 – 180 rainy days and the southern zone having between 190-210 days (Ajanya, 1992). Alam *et al.* (2013) asserted that cotton remains by far the most important natural fibre. It represents 38% of the fibre market. Cotton is crucially important for income, raw materials and employment provided its production and processing is adequate.

In Nigeria, prior to oil boom, cotton was one of the main sources of foreign exchange and second largest employer of labour after the public sector (Njoku, 2010). Since the abolition of the commodity boards in 1986 by the federal government, the marketing of cotton is being controlled by private individuals and companies as such, producer price is determined by the forces of demand and supply. This has caused great concern in the textile cotton fibre supply situation in the local market and export profile in the country thereby having a declining effect in its contribution to the agricultural economy of the country. The Raw Material Research Development Council (RMRDC, 2004) reported that against a total demand of about 80,000 MT of lint per annum (240,000 MT of seed cotton) by textile mills, the total production of lint has been less, thus resulting in a gap between demand and supply. It is expected that this gap will widen further as the steps taken by the government to revive the textile industry may lead to increase in capacity utilization, thus resulting in higher demand for cotton. The phenomenon was clearly revealed by the fact that most ginneries across the country have to operate below capacity. This claim was substantiated by Adesina (2012) who asserted that, the industries contribution to the value addition of cotton has dropped significantly from 25% in 1980 to 5% presently. He said out of 51 ginneries in operation in the 80s, only 10 ginneries are currently functional at low capacity. In addition,



inadequate production of local textile and fabric materials has led to importation to satisfy the domestic demand thereby reducing the foreign exchange reserve portfolio of the country.

The deregulation of cotton market was a major reform policy which sought to reduce distortions in the structure of the market through reduction in government intervention (Onu & Okunmadewa, 2008).

The increasing demand for cotton lint and seed to make the textile and oil processing industries sustainable led the research to examine the circumstances of cotton marketing in Gusau LGA of Zamfara state and also examine factors that will lead to improvement in the marketing of the crop. It was important to identify and examine socio economic attributes of cotton marketers. The study examined marketing constraints, as well as determining the profitability of marketing cotton. This is to provide insight into proper predictions and forecasts into the future of cotton marketing so as to enhance better planning and investments. This will enhance formulation of relevant policy, assist marketers and improve growth in this sub-sector. Zamfara state is the location of this study whose objectives were to: 1). identify the socio-economic characteristics of cotton marketers in the study area; 2). determine the profitability of cotton marketing; and 3). assess the constraints faced by cotton marketers in the study area.

MATERIALS AND METHODS

The Study Area

Gusau is a local government area located in Zamfara State, North Western Nigeria. It is located at latitude 12.17° and longitude 66° . It is situated at elevation 451 meters above sea level. The local government has an area of $3,364\text{km}^2$ and a population of 383,162 as of 2006 census. The city has a tropical climate. In Gusau, the annual average temperature is 26.3°C . About 888mm of precipitation fall annually. The most precipitation falls in August, the temperature is highest on average in April, at around 30.9°C . Agriculture forms the main occupation of the population; this constitutes the bulk of those involved in traditional farming, fishing, hunting and nomadic pasture.



Majority of the farmers are resource poor and small-scale traditional farmers combining arable crop production and cotton production over the years. Cotton farming is predominantly rain fed. In some instances, cotton is grown in crop mixtures with other food crops such as millet, sorghum, maize, cowpea, groundnut and soyabeans among others. Other farmers cultivate cotton as sole crop (Zamfara Agricultural Development Programme [ZADP], 2010). There has been cotton production in Zamfara state for decades and it has been a lifelong business of the farmers in villages, especially in the north-western part where the climatic conditions are more favourable. In some cases, farmers have organized themselves into groups and associations that assist them in input procurement, production, management and marketing of their products (Zamfara Agricultural Development Programme, 2010). Eight (8) out of 11 wards of Gusau LGA were randomly selected.

Sampling Procedure

Simple random sampling was also used to select 10 marketers from each of the selected wards, making a total of 80 cotton marketers.

Method of Data Collection

Data were obtained from primary source using questionnaire and interviews with respondents.

Method of Data Analysis

Data were analyzed using descriptive statistics; percentages and means and gross margin analysis was used to determine the profitability of cotton marketing in Gusau.

The gross margin analysis is mathematically expressed as:

$$GM = TR - TVC$$

$$TR = Q * P$$

$$TC = TVC + TFC$$

$$NI = TR - TC$$

$$\text{Return per Naira invested} = NI / TC$$

where;

GM = Gross Margin

TR = Total Revenue obtained from sale of cotton



TVC = Total Variable Costs incurred in the marketing of cotton

Q = Total Quantity of cotton

P = Unit Price of cotton (per bundle; approx. 182kg)

TC = Total Costs

TFC = Total Fixed Costs

NI = Net Income.

RESULTS AND DISCUSSIONS

Socio-economic Characteristics of Cotton Marketers

The socio-economic factors considered in this study include; age, sex, marital status, household size, educational level and years of experience. The result of the study as presented in Table 1 shows that the sampled cotton farmers comprised of 93.7% male and 6.2% female. The higher percent of males may be as a result of the culture of the people of the LGA, who are Hausas and where males are dominantly the bread winners in the family. About 55% of the farmers were within the age bracket of between 31-50 years with a mean age of 41.5 years. More than half (63.75%) of the respondents were married with 79.9% having the household size of between 5 to 14 people, and a mean household size of 11. Many of the respondents did not have a formal education (45%) although 50% of them had at least a secondary school certificate. Fourteen (14) years was the mean years of marketing experience, although more than half (58.7%) of the respondents had 16 years of marketing experience. Majority (82.5%) of the marketers purchases directly from the cotton farmers; this implies that cotton farmers are major stakeholders in the marketing of cotton. Many of the marketers are either rural assembler (58.75%) or wholesalers (35%), being an industrial product, cotton is mostly purchased in bulk and supplied to commission agents. All the cotton marketers sampled sold their product to commission agents.



Table 1: Socio-economic characteristics of Respondents (n = 80)

Characteristics	Frequency	Percentage	Mean
Age (years)			
21 – 30	16	20	41.5
31 – 40	25	31.3	
41 – 50	19	23.7	
51 – 60	15	18.7	
Above 60	5	6.6	
Sex			
Male	75	93.7	
Female	5	6.3	
Marital status			
Married	51	63.8	
Single	24	30.0	
Widow(er)	3	3.8	
Divorced	2	2.5	
Household size			
<4	3	3.7	11
5 – 9	29	36.2	
10 – 14	35	43.7	
15 – 19	7	8.7	
Above 20	6	7.5	
Educational level			
Non-formal education	36	45	
Primary education	4	5	
Secondary education	30	37.5	
Tertiary education	10	12.5	
Years of experience			
<3	2	2.5	14.4
4 – 7	7	8.7	
8 – 11	9	11.2	
12 – 15	15	18.7	
Above 16	47	58.7	
Total	80	100	

Source: Field survey (2017)



Profitability of Cotton Marketing

Table 2 shows that average acquisition cost of 1 bale (182kg) of cotton from the sampled cotton marketers in Gusau was ₦5,135:00, other variable costs incurred on each bale included; transportation ₦100:00, bags for packaging ₦100, packaging ₦100, loading and offloading ₦60 and tax ₦40 per bale, making a total of ₦5,535:00. A bale (182kg) of cotton was sold at ₦15, 00:00. The Gross margin was calculated to be ₦535:00 per bag. Return per Naira invested was ₦1.04. This is in line with the findings of Kudi *et al.* (2007) and Alam *et al.* (2013) reported that cotton production, marketing and processing are profitable ventures.

Table 2: Average costs and returns analysis of seed cotton purchased and marketed

Variables	Amount (₦)
Variable costs	
Acquisition	5,135
Transport	100
Packaging	100
Loading and off loading	60
Taxes	40
Total Variable Costs	5,535
Fixed Costs	1,100
Storage	1,100
Basin	525
Needle	15
Weighing scale	120
Rope	50
Total Fixed Costs	1,810
Total Costs	7,345
Revenue	
Price per bale of cotton	12,500
Price of cotton chaff	2,500
Total Revenue	15,000
Gross Margin	9,465
Net Income	7,655
Return per Naira invested	1.04

Source: Field survey (2017)



Constraints for Cotton Marketers in Gusau LGA

The challenges confronting cotton marketers in the study area as indicated in table 3, were price fluctuation, ranking 1st with 40%, followed by inadequate and high costs of inputs (38.7%), while transportation costs ranked 3rd with 23.7%, this in line with the findings of Alam *et al.* (2013) who reported high cost of inputs as a major constraint in cotton production. Other constraints were inadequate supply, insufficient capital and inadequate market stalls, ranking 4th, 5th and 6th, respectively.

Table 3: Distribution of respondents based on the constraints to cotton marketing

Constraint	Frequency	Percentage	Ranking
Price fluctuation	32	40.0	1st
Inadequate and high costs of inputs	15	38.7	2nd
Transportation costs	11	23.7	3rd
Inadequate supply	10	12.5	4th
Insufficient capital	7	8.7	5th
Inadequate market stalls	7	6.2	6th

Source: Field survey (2017)

CONCLUSION AND RECOMMENDATIONS

Marketing of cotton in Gusau LGA is a male dominated venture. The cotton farmers are major stakeholders in its marketing, as more than 70% of purchases in the study area are made at farm gate or farmers' compound. All purchases made were sold to commission agents. Cotton marketing is a profitable venture, although price fluctuation is a major constraint. The following recommendations were made:

1. For efficient marketing of cotton in the study area, the constraints faced by marketers must be drastically reduced to the barest minimum. This can be done through efficient policy for establishment of price stability, thereby making the price standard, proper supervision of cotton marketing, marketing programmes, effective extension services and proper agricultural finance that will boost income and help alleviate poverty.



2. Formation of farmers' cooperatives will help them stabilize and regulate marketing activities, and also give better access to convenient and suitable storage facilities that reduce deterioration and damage of product.
3. On the issue of insufficient capital, marketers need to be educated on how to plan and run their businesses efficiently based on the available capital.

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