PROFITABILITY OF OFADA RICE AMONG RICE MARKETERS IN YEWA NORTH LOCAL GOVERNMENT, OGUN STATE, NIGERIA

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Abstract

The study analyzed the profitability of ofada rice in theYewa North Local Government Area of Ogun State. Data used for the analysis were attained from115 ofada rice marketers through the Purposive sample procedure. Data were analyzed using descriptive statistics, Benefit-Cost Ratio, and market efficiency. The findings revealed that the majority (92.2%) of the respondents were females. Half (52.2%) of the respondents fall within the age of 20-40 years, which is considered to be active age and highly productive. About 61.7% of the ofada rice marketers were married. Most (60.9%) of the respondents are illiterate with no formal education. The result of benefit-cost ratio and market efficiency showed that for every ₦ 1 invested in the ofada rice business, it will generate revenue of ₦1.86 in return. Thus, ofada rice business will return 86 kobo to the rice marketer as net profits. The Market is efficient as it adds about 85% to the profit of the rice marketers compared to the situation when they sell at the farm gate. Bad roads, inadequate storage facilities, and adequate information about the market price which results in price fluctuation were the most severe problems faced by rice marketers. The study recommended that Government should publicize a minimum price for ofada rice farmers and marketers to bring stability to prices. Thereby, helping the farmers to dedicate and use their full efforts to acquire maximum production which will increase the export of ofada rice. And also reduce the profits of the wholesalers in the business.

Keywords: Benefit-cost ratio, Market efficiency, Ofada rice, Profitability

Introduction

Rice is a major food commodity in world trade and is the most consumed staple food in Nigeria. (Terwase, &Madu, 2014; world population review, 2019). Rice farming is suitable for areas with high rainfall as it requires much moisture for best performance under rigorous cultural practices (Moses,2007). The predominant types of rice production systems in Nigeria are the rain-fed upland, rain-fed lowland, and irrigated lowland systems (Singh, Fagade, Ukwungwu, Williams, Jagtap, Oladimeji, Efisue, &Okhidievbie, 1997). The demand for rice has increased over the last 40 years in Nigeria more than in any other African country (Sahel Newsletter, 2015). Local production of rice has not met the demand due to an increase in population growth rate, leading to substantial imports of rice which stand at about 1,000,000 metric tons yearly, which was estimated at over US$300 million in the world market (Akinbode, Dipeolu, &Ayinde, 2011). And this has led Nigeria to be the largest importer of rice in the African content and the second-largest importer in the world (FAOSTAT, 2008).

Ofada rice is a common local upland rice grown in Ogun state and other South-West states in Nigeria. The rice was named after a town, called Ofada in Ogun State. Its production occurs during the rainy season, which is from March to August. Ofada rice is upland rice grown on free-drawing soil where the water table is permanently below the roots of the rice plant. It is more difficult to mill and polish with some of the rice bran left on the grain. By tradition, the processing of ofada rice paddy involves three stages of treatment: soaking, parboiling, and drying, and sometimes processed using fermentation, which adds an aromatic quality to the product. The fact that the rice is unprocessed strengthens the flavor and makes it nutritionally superior to polish white rice, and is known for its high swelling ability when cooked. Osaretin,Ebuehi, &Oyewole (2007) revealed that ofada rice has higher protein, lower water, and fiber than normal foreign rice such as aroso. This has led to the increase in consumption of ofada rice in the last decade. Currently, it has the highest market price given its scarcity relative to other varieties including imported rice. According to Onwueme, & Sinha, (1991), ofada rice can be used in the making of starch for cloth, textiles, cosmetics, beer, wine, spirits, and oil which can be obtained from the rice bran which has a 14-17% content. The oil extracted can be used for soap production, as anti-corrosive and rust-resistant oil.

However, a report from Premium Times (2019) revealed that a lot of enormous potentials can occur in exporting ofada rice to the United Kingdom and the United State of America, since almost 340,000 Nigerians lives in the United Kingdom and consume over 120 tonnes of ofada rice annually while about 2 million Nigerians live in the United State of America which ofada rice can be packaged and sold to this population in 1 kg or 2kg like Uncle Bens rice. Presently, the Nigeria Government strategies to increase the production of local rice to 300,000 metric tonnes a year, by encouraging commercial large-scale rice farmers to reduce importation by 15 percent and cut costs by 342 million naira a year. (Vanguard Newspaper, 2016). This development will improve rice production in Nigeria because rice production is produced mainly by small-scale farmers who have restrictions in increasing their production and other difficulties due to a lack of technical know-how. A report from Oyedapo&Adekanbi (2017) shows that by the year 2050, the demand for rice in Nigeria would have increased to 35 million tonnes. Tomeet this demand, local production of rice must be developed. This study, therefore, determines the profitability of the ofada rice business by calculating the cost and returns, examining the socio-economic characteristics of ofada rice marketers, and identifying the problems faced by ofada rice marketers.

Methodology

Study Area:

This study was carried out in Yewa North Local Government Area of Ogun State, South-West of Nigeria. Aiyetoro is the headquarters of the Yewa North Local Government. It has the largest expanse of land with a size of 200,213.5 hectares and it has a population of 281,826 at the 2006 census. It comprises the Yewa and the ketus. The local Government is essentially a semi-savannah vegetation area endowed with the conducive climatic condition for Agricultural pursuits throughout the year. Their major occupation is farming, the consequence of the large deposit of mineral resources such as limestone and kaolin for industrial potential.

Sampling techniques

A Purposive sampling technique was used to select One hundred and fifty (115) ofada rice marketers from the study area.

Data collection and Analysis

Data were collected with well-structured questionnaires and an interview schedule from the Ofada rice marketer. Data collected includes information on socio-economic characteristics of ofada rice marketers such as gender, age, marital status,years of formal education, ofada rice marketing experience, and household size. Information on ofada rice returns and marketing costs such as transportation cost, labor cost, processing cost, cost of de-storing, union fees, the amount spent on pesticides during storage, cost of shop or stand in the market, and amount spent on tax. Also information on the problems faced by ofada rice marketers.

Data were analyzed with descriptive statics, benefit-cost ratio, and marketing efficiency. Descriptive statistics such as frequency, and percentage, were used to examine the socio-economic characteristics of ofada rice marketers, and also used to identify the problems faced by ofada rice marketers. Benefit-cost ratio analysis and market efficiency were used to determine the profitability of the ofada rice business.

The mathematical notations for the analytical tools are given below:

Benefit cost ratio (BCR) $= \frac{\sum TR}{\sum TC}$

Marketing efficiency $= \frac{\text{market profit}}{\text{Marketing cost}} \times 100$

Total revenue (TR) = Total income generated from the ofada rice business

Total cost (TC) = Transportation cost, labor cost, processing cost, union fees, the amount spent on pesticides during storage, and cost of shop or stand in the market.

Market profit = Total income generated from the ofada rice business

Marketing cost = Transportation cost, labor cost, processing cost, cost of de-storing, union fees, the amount spent on pesticides during storage, cost of shop /stand in the market, and the amount spent on tax.

Result and Discussion

4.1 Socio-economic Characteristics of Ofada Rice marketer

Table 1: Socio-economic Characteristics of Ofada Rice Marketers (n=115)

Characteristics	Frequency	Percentage
Gender		
Male	9	7.8
Female	106	92.2
Total	115	100
Age		
20-40	60	52.2
41-50	32	27.8
51 years and above	23	20
Total	115	100
Marital Status		
Single	6	5.2
Married	71	61.7
Widow	28	24.3
Divorced	10	8.7
Total	115	100
Years of Formal Education		
Primary	29	25.2
Secondary	12	10.4
Tertiary	4	3.5
No formal education	70	60.9
Total	115	100
Marketing Experience		
1-5	11	9.6
6-10	27	23.5
11-15	22	19.1
16-20	22	19.1
21 and above	33	28.7
Total	115	100
Full-time Marketer		
Yes	81	70.4
No	34	29.6
Total	115	100
Household Size		
1-3	13	11.3
4-6	49	42.6
7 and above	53	46.1
Total	115	100

Source: Field Survey, 2022

The socio-economic characteristics of ofada rice marketers that were selected for this study are; gender, age, marital status, years of formal education, ofada rice marketing experience, full-time marketer, and household size. Details are presented in table 1. It was found that the majority (92.2%) of the respondents were female, while 7.8% are male. This implies that ofada rice marketing activities were dominated by women. This result is in line with the finding of Agbetoyinbo (2020) who reported that majority (73.8%) of the local rice marketers in Ogun state were female. Half (52.2%) of the respondents fall within the age of 20-40 years, 27.8% fall within the age of 41 – 50 years, while 20% fall within the age of 51 years and above. This means that the majority of the ofada rice marketers are still in their active age and highly productive. These findings are in consonant with the report of Abetoyinbo (2020), which revealed that most (52.5%) of the local rice marketers in Ogun State were in their youthful and productive age, and this indicates better future for local rice marketing.The Majority (61.7%) of the ofada rice marketers are married, 5.2% are single, 24.3% are widows, and 8.7% are divorced. This implies that most of the respondents are married and marital status is not a barrier to ofada rice marketing.

However, 25.2% of the respondents had primary education, 10.4% had secondary education, 3.5% had tertiary education, and 60.9% had no formal education. This implies that most of the respondents are illiterate. This report is different from the findings of Abah (2015) who found that almost (96.67%) of rice marketers in Benue state had one form of formal education. Few (9.6%) of the respondents had 1-5 years of experience, 23.5% had 6-10years of experience, 19.1% had 11-15 years of experience, and19.1% had 16-20 years of experience and also, 28.7% had 21 and above years of experience. This implies that age and experience hold some of the respondents in the business. The Majority (70.4%) of the respondents were full-time ofada rice marketers and 29.6% of the respondents were not full-time ofada rice marketers. The household size of the marketers ranging between 7 and above had the highest percentage of 46.1%, followed by the household of 4-6 with 42.6% and also household size of 1-3 with 11.3%. This implies that ofada rice marketers are likely to have access to family labor that helps in the business thereby reducing the cost of labor.

4.2 Profitability of Ofada Rice.

The benefit-cost ratio and market efficiency was used to determine the profitability of the ofada rice business.
Benefit cost ratio (BCR) $= \frac{\Sigma TR}{\Sigma TC}$

Total revenue (TR) = Total income generated from the ofada rice business

Total cost (TC) = Transportation cost, labor cost, processing cost, union fees, the amount spent on pesticides during storage, and cost of shop or stand rent in the market.
Total revenue (TR) = 321985

Total cost (TC) = 173111

BCR $= \frac{321985}{173111}$

BCR = 1.86

This shows that for every ₦1 invested in the ofada rice business, it will generate revenue of ₦1.86 in return. And the gross margin is 86 kobo. Thus, the ofada rice business will return 86 kobo to the rice marketer as net profit. And this shows that the ofada rice business is profitable in the study area, the report is similar to Oyedapo&Adekanbi (2017) who reported that for every ₦1 invested in ofada rice production in Ogun state, it will generate revenue of ₦1.90 in return.

Marketing efficiency $= \frac{market\ profit}{Marketing\ cost} X\ 100$

Market profit = Total income generated from ofada rice business
Marketing cost = Transportation cost, labor cost, processing cost, cost of de-storing, union fees, the amount spent on pesticides during storage, cost of shop or stand in the market, and amount spent on tax.
Market profit = 321985
Marketing cost = 378806

Marketing efficiency $= \frac{321985}{378806} X\ 100$

Marketing efficiency = 85%

Efficiency is the effect of market participation on the profitability level of ofada rice. Therefore, the market is efficient as it adds about 85% to the profit of the rice farmers compared to the situation when they sell at the farm gate.

4.3   Problems Faced by Ofada Rice Marketers in Yewa North

Table 2: Marketing Problem of Ofada Rice Marketers.(n=115)

Marketing Problems	Frequency	Percentage
Accessibility of road during transportation		
Respondents that don't have access to a good road.	93	80.87
Respondents that have access to a good road.	22	19.13
Total	115	100
Sufficient vehicles for conveying products from farm to market.		
Respondents that had access to sufficient vehicles.	16	13.91
Respondents that had no access to sufficient vehicle.	99	86.09
Total	115	100
Issues during storage of ofada rice.		
Respondents with issues during the storage.		
Respondents without issues during the storage.	109	94.78
Total	6	5.22
	115	100
Level of Demand for ofada rice		
Taste	8	6.96
Consumer preference	28	24.34
Nutritional content	79	68.70
Total	115	100
Adequate information about market price.		
Respondents that received adequate information.	3	2.61
Respondents that don't received adequate information.	112	97.39
Total	115	100

Source: Field Survey, 2022

Problems faced by ofada rice marketers include road accessibility during transportation, sufficient vehicles to convey products to the market, issues during the storage of ofada rice, level of demand of ofada rice, and adequate information about market price.

Table 2 reveals that 80.87% of the respondents were unable to have access to a good road during transportation of ofada rice, while 19.13% of the respondents were able to have access to a good road during transportation. This implies that majority (80.87%) of ofada rice marketers had the problem of bad roads during transportation of ofada rice which increase the cost of transportation. This report is in line with Oyedapo, et. al., (2017) who show that bad roads were ranked third (16.67%) out of the constraints to ofada rice production. The majority (86.09%) of the respondents had no access to good and sufficient vehicles for conveying their products (ofada rice) from the farm to market, while 13.91% of the respondents had access to sufficient vehicles. This implies that majority of the respondents had no good and sufficient vehicles for conveying products from the farm to market which does hinder them from getting their products ready in time for marketing. The majority (94.78%) of the respondents had issues during the storage of their products while a few (5.22%) of the respondents had no issues during the storage of ofada rice. This implies that majority of the respondents had issues due to lack of pesticides or inadequate storage facilities due to high cost.

Furthermore, 68.70% of the respondents agree that nutritional content determines the level at which ofada rice will be demanded, 24.34% of the respondents agree that consumer preference determines the level at which ofada rice will be

demanded, while 6.96% of the respondents agree that taste determines the level at which ofada rice will be demanded. The majority (97.39%) of the respondents agreed that they don't have adequate information about market prices which results in price fluctuations, while 2.61% of the respondents have information about market prices. This implies that the majority of the respondents depend upon other channel members of rice marketing such as retailers, wholesalers, farmers, etc. This report is in line with Tana, Okwach, Mutebi, Okach, &Onyango, (2011) who reported that one of the agricultural marketing problems of farmers is to depend upon different sources like co-workers and other channel members of marketing to receive information about market prices.

Conclusion and Recommendation

Ofada rice marketing is not yet developed, and the business serves as an opportunity to increase the nation's revenue, economic growth and development and also provides a means of living for most Nigerian and their families' thereby decreasing poverty in the nation. The empirical result from the study shows that the ofada rice business is profitable to the marketers because, for every ⱂ 1 invested in the ofada rice business, it will generate revenue of ⱂ1.86 in return. Thus, the ofada rice business will return 86 kobo to the rice marketer as a profit. The market is efficient as it adds about 85% to the profit of the rice marketers compared to the situation when they sell at the farm gate. Also, bad roads, absence of storage facilities such as lack of pesticides, or inadequate storage facilities due to high cost and adequate information about the market price which results in price fluctuation were the most severe problems faced by rice marketers. The following recommendations are therefore suggested:

1. Organization of cooperatives societies to ofada rice marketers, to improve credit access to the marketers, which will help in the area of storage facilities to reduce the cost.

2. A good road network should be provided by the Government for easy transportation of ofada rice.

3. Government should publicize a minimum price for ofada rice farmers and marketers to bring stability in prices. Thereby, helping the farmers to dedicate and use their full efforts to acquire maximum production which will increase the export of ofada rice. And also reduce the profits of the wholesalers who acquire more profits than the retailers and the farmers in the business.

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