

Economics of Rice Production and Marketing in Nigeria: A Study of Ebonyi State

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Abstracts: This study examines the economics of rice production and marketing in Nigeria. The costs and returns, marketing margin, and constraints associated with rice production and marketing were examined. Seven states and nine markets were selected for investigations. Stratified random sampling techniques were used to collect data from forty-five respondents. The simple descriptive statistics and farm firm budget techniques were the major tools used in analyzing the data. Result of the analysis showed that the rice Farmers made a 68% gross income while the net income was at 43% which is indicative that the middlemen did not make excessive profit at the expense of the primary producers. Constraints associated with rice production include high cost of labour and inputs in terms of machinery while that of marketing included high cost of transportation and inadequate storage facilities. The study suggests an improvement of Farm inputs and equipment, the road network system and provision of agricultural credit to enable rice farmers and traders expand the volume of their operations.

The choice of these towns was based on the fact that they have the highest concentration of the rice farmers, Rice Mills and consumers in the State. The swampy and soft nature of the most part of those areas makes cultivation easy. In the researcher's research project, simple random sampling techniques was used to select the sample for this study. This was mainly to ensure that the sample was truly the representation of the total population. Each of the thirteen towns and markets were given an equal opportunity of appearing in the experiment. It sets also to study benchmark of activity or performance of a given equity market – the relationship between domestic or circular market and its contribution to making Nigeria a vibrant economy.

Key words: Economics of rice production, Marketing, Commercial or mechanised rice farming, Risk management, Vibrant economy.

Contribution/Originality:

This study contributes in the existing level of academic research, progressive policy development of government and implementation in Nigeria. This study uses new estimation methodology that is geared towards galvanising the technological base level of Nigeria as a developing nation. This study projects new aggregate level distinction on research matter analysis. This study is one of very few studies which have investigated the result of measure analysis of research, policy and practice in relation to logistics management. The paper contributes to the first grade logical analysis of new world understanding of developing nations' grading in orbit. This paper's contribution is finding that a lot still have to be done to make rice production and maketing on of the frontline revenue yielding and source of foreign exchange to Nigeria.

1.Introduction

Rice is one of the major cereal crops of the tropical regions of the world. It ranks second among the staple food crops in Nigeria. Its production, processing, storage and distribution is therefore of significant importance not only to the average Nigerian household but also to the Federal Government. The desire to be self-sufficient in rice production was what necessitated the imposition of a ban on its importation in 1985. Prior to the ban, Nigeria spent huge sums of money on rice importation as shown in Table 1. On page 7 Since the ban, however, several policy measures have been put in place to raise rice productivity and output in the country.

In Economics, production is not complete until the finished product is in the hands of the ultimate consumer. Production is usually defined as the creation of utilities. The rice farmer in Ebonyi State is concerned solely with the creation of form utility, the creation of wealth and his task as primary producers does not end only at the farm gate with the harvest of his rice produce. He goes further to survey various markets to achieve optimum profit. All other activities and processes involved in the movement of the rice produce to the State capital and other areas of consumer concentration fall within the sphere of rice marketing.

Rice marketing can thus be said to begin at the farm gate. And it is defined as the performance of all the business activities involved in the flow of the product from the point of initial production until it is in the hands of the final consumer, (Kohls and Uhls, (1980). The production process involves Nursery/ planting, transplantation, nurturing, harvesting through milling and bagging (Nwele, (1992), Lecture on rice production for cooperative marketing in Agriculture,). The marketing task involves transferring the goods from producers to consumers. It is the marketing function that ensures that consumers get the product in form, amount, place and time desired by them (Olukosi and Isitore, 1990).

At harvest, the rice produce cannot go directly to the final consumer. It will be processed. This involves creating of 'form utility'. In other words, anybody who is involved in the processing of rice into the form required by the consumer is as important in the production process as the peasant rice farmer. Furthermore, rice production is generally seasonal while consumption is regular and continuous throughout the year. Storage is therefore required to adjust supply to demand; and 'time utility' of the production process is added by the market participant who is involved in the rice storage. The storage makes it easy and ensures that consumers get the product at the time desired by them.

Unlike other parts of the country where rice farms are scattered in small piece/Parcells of Land, Ebonyi State has large rice farms at both strategic and designated locations of the state notably at Abbaomege, Ikwo, Afikpo, Izzi, Akaeze, Eda, a part of Ezza and Eziulo. In these areas Rice Farms are located not far away from areas of consumer concentration, and transportation is required to convey the collected produced from the rural market areas where primary production takes place to the urban markets of Abakaliki, Abbaomege, and Afikpo where milling and large distributive transaction take place. This involves the creation of place where it is most required by the ready consumers/buyers. Finally, the farmer

receives/expects payment when his produce leaves his possession. Some financial arrangement must be made to cover all the various stages until the retailer sells it to the ultimate consumer. According to Abbott and Makeham (1979), “it is marketing that produces the services between production and consumption”.

The Rice produce marketing chain is broad in nature as sometimes it involves the process of going to several rural markets to collect the small quantities of rice produce before arrangements are made for storage, sorting, processing, grading and transportation. Rice marketing cannot therefore be restricted only to the function, “agricultural marketing involves the supply of raw materials to processing industries and marketing of processed products includes an assessment of demand as well as policies related to agricultural marketing” (Adegeye and Dittoh, 1982). This means that agricultural marketing also involves passing information about market demand from consumers to producers, and vice versa.

Problem Statement

Following the ban imposed on the importation of rice in 1985, Government have always proposed serious attention in the area of primary production; that is, raising domestic output of rice. But usually lacked implementation to increase rice production, input supply, physical investment in rice research and development and knowledge transfer through extension services. Marketing function links producers with consumers, and stimulates output.

With the important nature of marketing in the production process, one would want to believe that a government that is interested in raising rice productivity and output would give the required attention to credit support towards the produce increase and storage. Ironically, and indeed, paradoxically, the Federal Government abolished agricultural produce marketing institutions including the Grains Marketing Board in 1986. And by 1988, the government announced its disengagement from Agricultural produce marketing, including rice marketing. The issue was not receiving adequate attention in Nigeria, but the neglect it suffered since 1986.

Research Questions

This study is aimed at the provision of useful answers to the following research questions regarding economics of rice marketing in Ebonyi State and Nigeria.

1. Who are the actual people involved in rice production in Ebonyi State?
2. What are the functions of rice marketers?
3. Are they making excess profit at the expense of rice producers?
4. Is rice marketing profitable
5. What are the constraints (if any) to increasing the profit of middlemen involved in rice marketing?

Objective of the Study

The broad objective of this study is to examine the economics of rice production and marketing in Nigeria *the specific objectives are as follows:

- a) To describe the socio-economic characteristics of all persons involved in rice production and marketing in the study area;
- b) To determine the gross and net income of the rice producers and marketers;
- c) To examine the rice marketing margin with a view to determining whether the middlemen are making excess profit at the expense of the primary producers;
- d) To describe the rice production and marketing system (chain and channel) in the study area;
- e) To identify the constraints associated with rice production and marketing; and
- f) To suggest possible ways of improving on the rice production and marketing system in the study area.
- g) To answer questions regarding the profitability of rice production and marketing in Ebonyi State and in Nigeria.

This study also seeks to provide current empirical information on information on the state and nature of rice production and marketing in Ebonyi State, Nigeria. It will as well appraise rice production and marketing system in the state, using seven Local government Areas: Izzi, Onicha- (Abbaomege), Ikwo, Afikpo South, Afikpo North, Ishielu Local Government Areas, as a case study. The costs and returns involved in rice production and marketing are examined and the nature of problems affecting rice production and marketing and distribution in the state are appraised.

Justification of the Study

It is hoped that the information provided in this study would generate further interest in agricultural produce marketing and also help policy makers to re-appraise government position on rice production and marketing in Nigeria. The researcher's scientific survey reveal that, Soil Texture, Water Level and certain magnitude in a sample areas shows that Ebonyi State have the potential for large scale and high quality rice production for local consumption and for export. And that if well harnessed it will make Nigeria and Africa proud.

Table 1: Importation of Milled Rice to Nigeria (1960-1984)

Year	Total Quantity Imported ('000 Tons)	Value ('000 U.S. Dollars. Cif)
1960	2	440
1961	1	200
1962	2	351

1963	1	270
1964	1	254
1965	1	340
1966	1	345
1967	2	398
1968	*	72
1969	1	71
1970	2	190
1971	*	71
1972	6	1680
1973	1	405
1974	5	2397
1975	7	3858
1976	45	31965
1977	413	240071
1978	563	304813
1979	245	140000
1980	400	224000
1981	600	350000
1982	539	290079
1983	630	242000
1984	450	183000

NOTE: * = Less than half of unit employed

Cif= Cost insurance and freight

Source: World Rice Statistics, 1985. Adelita, Emerita, P.C. (1986).

The international Rice Research Institute, Manila, Philippines, pp. 78-79

II. Review of Related Literature

Various studies have been carried out by different scholars, with regard to the marketing of agricultural products, particularly rice in different areas. Such studies focused on a wider range area such as the concept of market and marketing, grain marketing to the economic aspects of marketing. Furthermore, scholars have also delved into the problems of agricultural marketing as well as its importance in economic development. In this part of the study, attempt is made to cite and examine the relevant works of other authors and researches on economics of marketing of agricultural product, most especially rice marketing, the focus of this project work.

Marketing involves the transformation of goods in space, time and form from producers to the consumers. Marketing is the sum total of all business activities involved in the movement of commodities from production to consumption. Kohls and Uhls (1980) had suggested that agricultural commodities marketing is defined as the performance of all business activities involved in the flow of goods and services from the point of initial production to the time they are in the hands of ultimate consumers.

Market and marketing do mean the same concept. Distinguishing market from marketing, Olukosi and Isitor (1990) wrote also that, marketing involves all those legal, physical and economic services which are necessary to make products from the farm available to the consumers in the form and amount desired by the consumers; at the place desired by the consumer; and at the price consumers and middlemen are willing to pay to take possession utilities. For instance a tone of maize grain produced in Plateau or Kaduna States does not give a cornflake's consumer in Lagos satisfaction until it is transported to a flour mill where it is processed into maize flour and further transported to a bakery in Jos where it is transformed into final products (cornflakes) which gives the necessary satisfaction, and finally packaged and transported to Lagos as finished goods (cornflakes).

Marketing in simple terms is also considered as business activities which take place in the market and includes among other things the exchange transaction between buyers and sellers, with a view to maximizing profit. It is the process through which goods are made available for consumption.

Market and Marketing

Marketing is that part of Economics which deals with the creation of time, place, and possession utilities. It is all activities having to do with effecting changes in the ownership and possession of goods and services, it is the performance of Business activities that direct and regulate the flow of goods and services from producer to consumer, or user, in an established or certified exchange aggregate (or market). It is our understanding of the fact that the today's market and marketing concept cannot function without the necessary flow of information and its machinery that brings to focus the need for positive communication process and information management.

Market on its own part is a particular destination/location or an aggregate where business transactions take place as it is in the case of the researcher's market at Afikpo, Abakaliki, Abbaomege, Akaeze, Ikwo, Eziulo, The Mills, and Cooperative Stores, etc.

Marketing is a complex phenomenon that is viewed differently by different classes of people or community and persons.

Marketing calls for considerable individual's initiative, decision making and skill. and agricultural marketing include the selling to farmers the supplies needed for production. Agricultural marketing means the sum total of all the operations involved in the manufacturing and distribution of farm supplies, production on farms and the processing, storage, and distribution of farm commodities. Agricultural marketing is grouped into aggregates of::

- a) Farm supplies,
- b) Farm production, and
- c) Processing and distribution.

Considering all the various views put forward, marketing could therefore be said to be the process that organize and facilitate business activities involving what to procure, how to produce them and then, the distribution of such products.

Purpose of Marketing Studies

The purpose of marketing studies is to:

- a) Learn how any marketing system links with the whole production system, which helps in understanding and minimizing constraints to increase agricultural output.
- b) Understand the efficiency of an existing marketing system and that of alternative ones. In this case – rice production and marketing.
- c) Learn how government pricing policies will affect consumption and production of certain commodities.
- d) Maintenance of good and efficient marketing system that accelerates the pace of economic development by encouraging specialization that leads to increase in output.

Marketing studies is therefore needed to understand the complexity of the marketing process as introduced by the existence of agencies or individuals who act as market intermediaries middlemen and whose business is to facilitate marketing process.

Marketing System and Functions

The marketing system must provide information flow from the consumers and back through the processing, storage and transportation function to the producers' response to price signals, producing commodities in relative quantities as dictated by selling prices and costs of production.

Efficient marketing system is an important element in the development process. The efficient marketing system responds by providing goods and services over time and space and in the form consumers want at the lowest possible cost. Marketing system efficiency arises from efficient resources used in that sectors without which wasteful marketing costs develop well as qualitative and quantitative losses in the process of the creation of time, form and place utility of the products.

Marketing functions can be put as major specialized activities performed in marketing system which include buying, selling, processing, storage, transportation, standardization, financing, risk-bearing and the provision of market information. Buying and selling are exchange functions that mark the point at which prices are set and transfer title to goods and services takes place. Buying involves seeking out the sources of supply, assembly and all activities connected with purchases. Selling is more than passively accepting the prices offered. It embraces all that is called merchandising. It involves all decisions on the unit of sale, the best channel of distribution, advertising, and all promotional activities. Processing, storage and transportation are physical functions. They involve the handling, movement and actual location or possession change of the commodity.

Marketing Intermediaries

In traditional marketing system of rice and other grains, there is usually the participation of many intermediaries who are involved in services like assembling, storage, transportation, storing and advancing as being parasitic on those who really produce, that is, the farmers.

Critics of middlemen functions argue that the objective of middlemen is to fill their pockets with ill-gotten gain even at the expense of suffering masses. Festus (1984) agreed with this and wrote that, instead of maintaining the usual balance between supply and demand they tend to hoard and create artificial scarcity. Another criticism of middlemen is that large market margin could be reduced by eliminating middlemen. Kohls and Uhls (1980) referred to them as, traders who normally resort to hoarding to maximize unnecessary profits thereby creating artificial scarcity.

However, Ejiga (1979), saw the attack on the number of middlemen as outrageous and unfair; as according to him, the attack on the number of middlemen and the accusation about their exploitative are both due to misunderstanding of the forces that operate and useful roles of traders. He went further to say that, for this reason even though middlemen are exploiting both producers and consumers they still perform marketing functions that are beneficial to the final consumers.

Middlemen carry out certain functions that help in stabilizing prices, by carrying out movement of commodities over space and time.

Marketing Channel

The marketing channel explains that for exchange to take place, people must meet in suitable places where facilities for display and storage of commodities are available.

Marketing channel is divided into two types: (i) Centralized channel and (ii) decentralized channel. A centralized marketing channel is one in which the farmers products are brought together in larger central and terminal markets. During the course of the research the researcher came across such central points like the ATC Rice Mill Abbaomege and ACODA Stores (i.e. Abbaomege Cooperative Development Association stores) at Igberi and Nwudara markets in Ikwo. These were stores set up there as special provisions for collected farmers to bring their products to a particular point for official process marketing distribution. These are purchased by the processors or wholesalers from commission men and brokers who act as the farmer's selling agents. While a decentralized marketing channel on the other hand is one that does not use such established large market facilities, rather, wholesalers and processors purchase directly from the farmers or traders. The marketing channel for agricultural products in Nigeria is mainly the decentralized type. And this is also what the researcher experienced more in the research, in all the markets visited at Abakaliki, Afikpo, Abbaomege, Akaeze, Ikwo, Eda, etc.

Marketing Chains and Margins

The marketing chain is a part of marketing channel that describes the succession of markets through which products pass until they reach the consumers. It reveals the relative importance of various market or exchange points in the marketing system.

Marketing margin represents the difference in price of a given commodity at different stages and as possession moves from the primary producer to the ultimate consumer.

Marketing margins differ from one product to another because the marketing services needed also differ from product to product. Supporting this view, Adekenye (1988) wrote that, the importance of marketing margins is that they are used to assess market performance. He went further to say that, marketing margins are used to determine the share of consumers spacing that reaches the producer and extent to which price changes reflects on the farmer.

Thus, if the farmer's price is low, the incentive to increase output may be dampened as prices and profits at the produce level may not reflect the opportunity of the input used. In this sense, resources are being misallocated. Thus marketing margins are sometimes regarded as the measure of both efficiency and inefficiency.

Role of Marketing in Economic Development

The role of marketing in economic development hinges on the fact that without efficient marketing systems, the farmer will not be inclined to produce and increase production. According to Kriesbery (1970), if the marketing system does not serve the interest and need of producer (if his production does not move to market and bring his additional earning), he will not be inclined to increase production.

Marketing of Agricultural Products in Nigeria

Rice is predominantly grown in all parts of Ebonyi State as it is in few other selected areas of the country, and Ebonyi State as the largest producer of rice has some marketing system characterized by many buyers and sellers that is similar to other food grains. Rural sellers or persistent farmer offer for sale at a time in a market which are held periodically, once or twice weekly, small quantities of the rice while middlemen come from different parts of the state to buy and resale, or help whole sellers from outside of the state to make their bulk purchase, Transportation has been a major problem encountered by rural farmers as there are no access roads to their farms. The farmers usually carry their grains to the markets in bags, baskets, and basins while the mode of transportation is usually by head, bicycles and two-wheel manual truck.

The actual price tag for rice products can not be influenced by factors like the familiarity between the buyer and the seller, the language spoken by the buyer and transaction time of the day.

Measurement has no standard at all. The unit varies from one local government to another and even from one part of a local government to another. But the most common units of measure are "bushel" and "cups" for milled rice only. Even where bags are used, the areas vary from market to market and from one seller to another. 100 cups "Bushel" and "Cigarette cups" are the standard measurement units in Ebonyi Local Markets and Rice Mills.

Food grains, most especially rice, are expected to be moved from the farm gate and rural markets to urban centers where their demand is relatively high. This is because the urban centers are inhabited by civil servants and workers in the private sectors who depend entirely on farm products from the rural farmers. Markets in the urban centers hold daily (example is

Rice Mill/ Abakpa market in Abakaliki, Eke Market in Afikpo, and Abbaomege Rice Mill/ Station Market in Abbaomege). In these markets, the inter-state wholesalers buy in large quantities and transport them by road or rail to urban markets. The markets include Ekeoha/Ariaria Market in Aba, Ochanga/Woliwo/Main Market in Onitsha, Ogbete main Market Enugu, and at times Iddo Market in Lagos and Bodija market in Ibadan. Apart from this category of wholesalers there are commission agents buying for agricultural business firms and other processors in the rural markets.

The storage of food grains, especially rice, takes place at various levels in the marketing system. Farmers from time to time store some of their grains in their compounds for a few months. The period helps farmers to take advantage of any rise in price in future. Before storage, grains are usually sun-dried to reduce their moisture content. To protect grains against rodents and insects and pests; storage chemicals such as actellic dust, lindane dust and phostoxin are sprayed.

Wholesalers on the other hand store their grains for sometime in granaries, ware-houses and silos. However, one must not fail to point out the fact that storage facilities are generally not adequate in Nigeria or not in existence at all. Studies carried out have shown past harvest losses of between 20% and 30% due to poor storage facilities. The resultant effect has been a fluctuation of grain prices from one production and/ or harvest season to another.

This literature review has been able to consider marketing of agricultural food grains, especially rice in Nigeria, and Ebonyi State in particular. It has also considered various elements of marketing system in general.

II.1 Empirical Review

A lot of studies testing the effect of the active ingredients of economic growth, in relations to, business/commerce and industry, have been carried out in the past and different parts of the world and Nigeria. Sample areas of Ebonyi State used for this study were; Izzi, Abbaomege, Afikpo, Ikwo, Akaeze, Eda, and Eziulor. The choice of these towns was based on the fact that they have the highest concentration of the rice farmers, Rice Mills and consumers in the State. They also procure food grains from other neighbouring towns. The effect of cultivation and bush burning has reduced vegetation in many places of the area. In such areas grasses normally reach heights of between 2.7 – 3.5 meters or more. Some has low nutritive value during dry season and replaces them with ones whose pastures are lush with higher nutritive value.

The swampy and soft nature of the most part of those areas makes cultivation easy. In the researcher's research project, simple random sampling techniques was used to select the sample for this study. This was mainly to ensure that the sample was truly the representation of the total population. Out of a total of thirteen towns and markets visited in Ebonyi State, seven were selected for the study. Each of the thirteen towns and markets were given an equal opportunity of appearing in the experiment.

Verbal interview with local rice farmers and marketers was used to supplement the questionnaire method. I also applied the method of direct observation of buying and selling

of the product (rice) to determine the process of bargaining and bargaining powers between marketers and the rice producers. My questionnaire framework took the following track. Marketers of rice produce are known through their personal efforts.

Analysis

Analysis to describe the socio-economic characteristics of the respondents:

NI	=	Net Income,	GI	=	Gross Income
TR	=	Total Return,	TC	=	Total Cost
TVC	=	Total Variable Cost,	TFC	=	Total Fixed Cost
QR	=	Quantity of Rice,	P	=	Price

To obtain the depreciation value on storage and proceeding facilities, the straight line method was used.

$$D = \frac{OP - S}{N}$$

Where

D	=	Depreciation
CP	=	Original Cost/Price
S	=	Salvage Value
P	=	Number of years of life span.

Finally, market margin analysis was conducted to determine the variation in the price as the rice produce moves from the producer through the successive market stages until it reaches the hands of consumer.

Successive market stages

Producer (Farmer) – Middlemen/Agent – Wholesaler – Retailer – Consumer

This would enable a comparison between the price received by the producer and the price paid by the final consumer.

With the great movement of change in the world, the network of relations involving production, distribution and consumption needs to be made as personal as possible because they are links of service between the brotherhoods of man.

In the principles of subsidiary function and relative efficiency, our government should be active (and pro-active) to their responsibilities towards private entrepreneurship since the state of an economy determines the condition of every member of that society.

III. Model, Data Sources, Measurement and Estimation Techniques

III.1 Model and Data Sources

The theoretical and empirical literature discussed in this research as expressed above, shows that the nexus between the productive elements of

or individual in small scale investment opportunities of a socio-political economy. Entrepreneurship development: Government has the unreserved responsibility of galvanizing its society's man power and human resource application in micro

business model, including innovative and marketing products (IMP).

III. 2 Data Description and Measurement

It is to be noted that there is no single measure of method analysis used to determine the effect of the economics of rice production and marketing in Nigeria.

Presentation, Analysis and Interpretation of Data

- 4.0 Introduction
- 4.1 Analysis of Data Procedure.....
- 4.2 Results and Discussions.
General Characteristics of Respondents.....

111.2.1 Socio-economic backgrounds of respondents

The study examine the socio-economic characteristics of the respondents. It was observed during the study that the decision making process of a farmer or trader is, more often than not, affected by this biographic and economic characteristics such as age, level of education, farm size and or quantity of produce handled. The relevant socio-economic characteristics of rice producers and marketers in the study are described below.

Age

The age distribution of the rice producers and marketers is presented in Table 1 below. The table shows that the majority of producers and traders fall within 35-50 years age bracket. The age bracket accounted for 60% of producers and 65%.

Table 2

Age distribution of Producers and Marketers

	Producers			Marketers	
Age (year)	No. of Respondents	%		No. of Respondents	%
21-30	9	15.0		9	15.0
35-50	36	60.0		39	65.0
51-60	10	16.7		9	15.0
61-70	5	8.3		3	5.0
Total	60	100		60	100

Level of Education

The level of education of a famer/trader is of significant importance in his decision making process. Literate famers have been found to adopt new farm innovation more quickly than illiterate farmers (Igbán, 1988). Also, rice traders who are fairly educated would find it relatively easy in their dealing with consumers with respect to communication.

Quantity of Rice Produced

The various level of quantity of rice produced by producers and marketers are shown in Table 3. The table shows that most of the producers were producing within range of -10 bags (1 bag = 100kg) of rice. The average output of rice produced by the farmers can be put at 7.4 bags while the average rice produce handled by the marketers is put at 3.1 bags. Given that a bag of rice is equivalent to 100kg one can then conclude that the quantity of rice produced by

farmers and/or handled by marketers is high enough to attract government interest and annual special grant for national economics of scale.

Table 3

Quantity of Rice Handled or Produced.

	Producers		Marketers	
Quantity of Rice (bags)	No. of Respondents	%	No. of Respondents	%
1-6	34	55.6	54	90.0
7-9	10	16.7	4	6.7
10-15	10	20.7	0	0.0
16-50	6	7.0	0	0.0
51-100	0	0.0	0	0.0
Total	60	100	60	100

Types of Intermediaries in Rice Marketing

Results of the study shows that, there are two main market intermediaries – retailers and wholesalers in the study area. Table 4 below shows that out of 60 respondents 43 representing 71.8% were retailers while the remaining 14 which accounts for 25.0% were wholesalers.

Table 4

Table of Intermediary in Rice Marketing

Type of Intermediary	No. of Respondents	%
Wholesaler	14	25.0
Retailer	43	71.8
Total	60	100

Cost Incurred By Middlemen Storage

Storage of all types of commodity is essential for effective marketing system. It is also necessary to receive waste which may result from spoilage of commodities. In the study it was observed that most producers/farmers of rice in Ebonyi State use their private houses and rice mills as their storage depot while marketers use small market stores and lock-up shops as warehouses.

Transportation

Transportation is the physical movement of the farm products from one location to another. It gives satisfaction to consumers as to have what they want at a particular place and at the time they need it. It was observed in the study that majority of traders transported their products with motor vehicle, while some used two wheels truck or bicycle and some others used basins carried by women on their head as means of transport.

Processing

Processing is the conversion of a commodity from its raw state to a form more acceptable to the buyers on the next stage in the chain of distribution. On harvestings the processing method used by farmer and middlemen after threshing is parboiling, drying and milling, and then bagging.

Total Cost and Total Returns in Rice Marketing

Table 5 below shows the total cost incurred and total returns of the respondents in rice marketing in Ebonyi State. The table indicates that 1807.95 was incurred as total costs of rice marketing while 2640.00 was obtained as total revenue (which was quantity of rice sold multiplied by price of rice per bag). The profit made by the respondent was 833.05, that is $NI = TR - TC$ and $GM = TR - TVC = N2640.00 - 1767.50 = 872.50$, which indicates that rice marketing was profitable, since net income is positive.

Table 5

Total Cost and Total Returns in Rice Marketing

Total Costs		Total Returns	
Total Variable Costs (TVC)			
1. Cost of Rice from Producers	1680.00	Sales of Rice	1920.00
2. Processing	56.00	Values of Home Consumption	720.00
3. Storage	17.50	TR	2640.00
4. Transportation	<u>14.00</u>		
	<u>1767.50</u>		
Total Fixed Cost (TFC)		Total Return	
Rent on Store/Warehouse	29.00		
Depreciation	11.00		
Storage/Processing Facilities			
TFC	40.45		2640.00
Total Cost = TVC + TFC			
= 1767.50 + 40.45 = 1807.5			
Net Income = TR – TC = 2640.00 – 1807.5 = 833.05			
Gross Margin = TR – TVC = 2640.00 – 1767.50 = 872.50 = 872.50			

Marketing Margin

Marketing margin is the difference in price paid by the consumers and that received by the producers. It is the outcome of the demand for and the supply of such services. The difference in prices at which the marketers bought their rice and the price they sold it to the consumers is made up of margin taken by the middlemen plus the transport, storage, and processing charges.

Rice Marketing System (Chain & Channel)

Marketing channel is the path that a commodity takes from its raw form to the finished form or the process at which is moved from the producers to the final consumers. It is the sequence

of middlemen or intermediaries, through which rice produce, pass enroute from producers/farmers to consumers. In the study area, rice produce moves from the farmer or farm gate to the rural buyers in the village who then transport it to the retailer and wholesaler in the urban centers.

Marketing chain describes the succession of markets through which products pass until they reach the consumers. It is also part of marketing channel.

Constraints Associated With Rice Marketing.

In this research, majority of marketers (46.7%) were facing the problems of inaccessibility to feeder roads which leads to high cost of transportation. Other constraints associated with rice marketing were found to be lack of adequate storage and processing facilities which leads to low quantity of rice produced; inadequate credit facilities and lack of uniformity in price. The possible solutions to these constraints are provision of good roads to reduce cost of transportation, provision of adequate storage and processing facilities, provision of agricultural credit to enable rice marketing personnel and rice farmers expand.

Rice Production

Rice is cultivated in virtually all the agro-ecological zone; in, Nigeria despite this the area cultivated to rice still appears small. In year 2000 out of about 25 million hectares of land cultivated to various food crops, only about 6.3% has cultivated to rice. During the period the average national yield was 1.47 tons per hectare. Significant improvement in rice production in Nigeria occurred in 1980- when outputs increases to 1 million tons while cultivated area rose to 550 thousand hectares 1-98 tons per hectare respectively. Throughout the 1980, rice output and yield increased. But in 1990s, while rice output increased, the yield of rice decline suggested extensive rice cultivated.

Figure 1: Area Cultivated and Rice Output in Nigeria

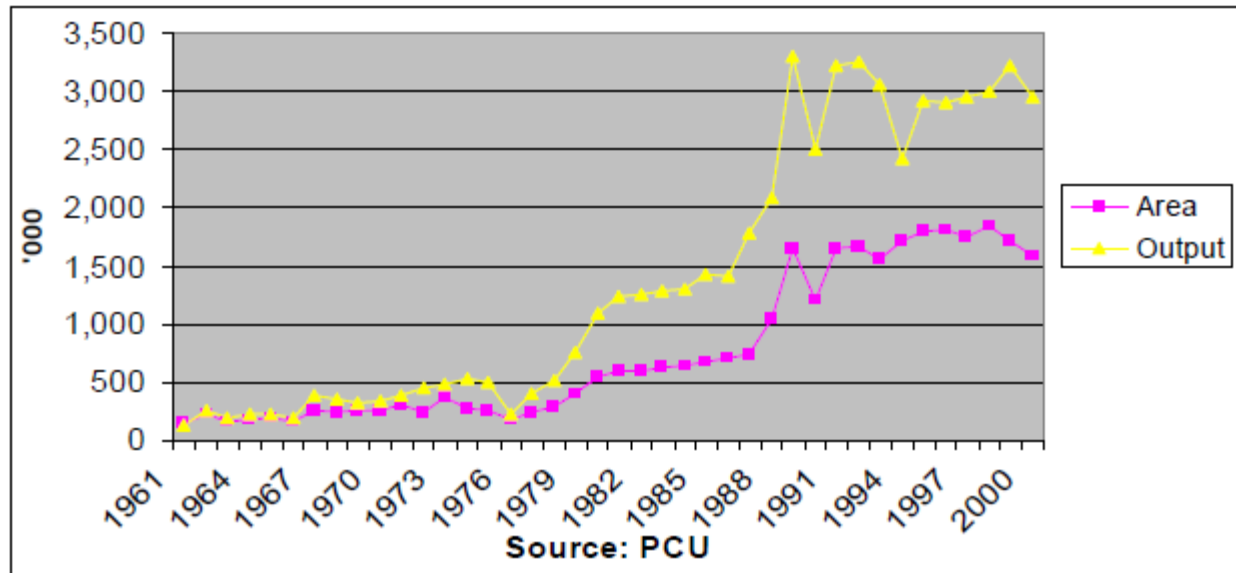
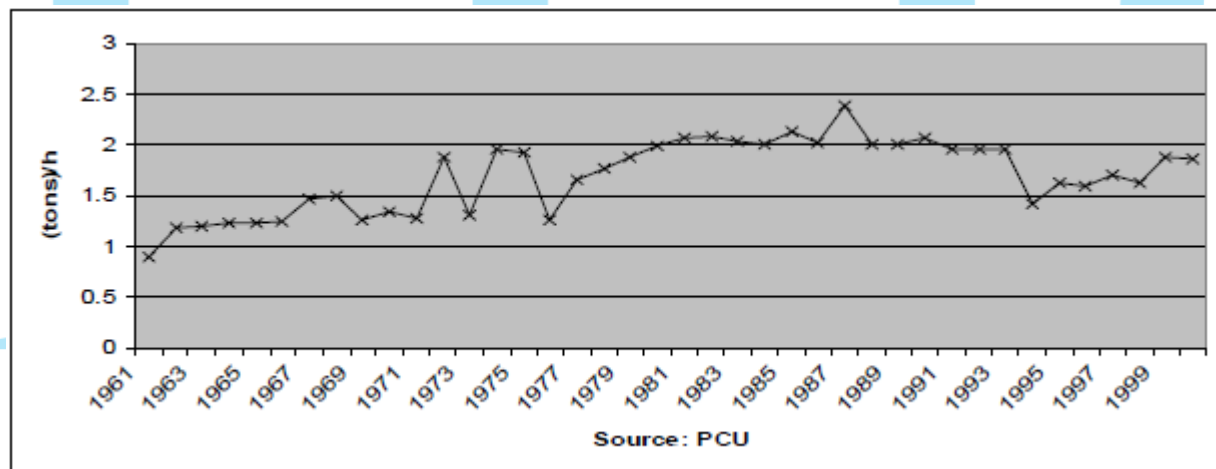


Figure 2: Yield of rice in Nigeria

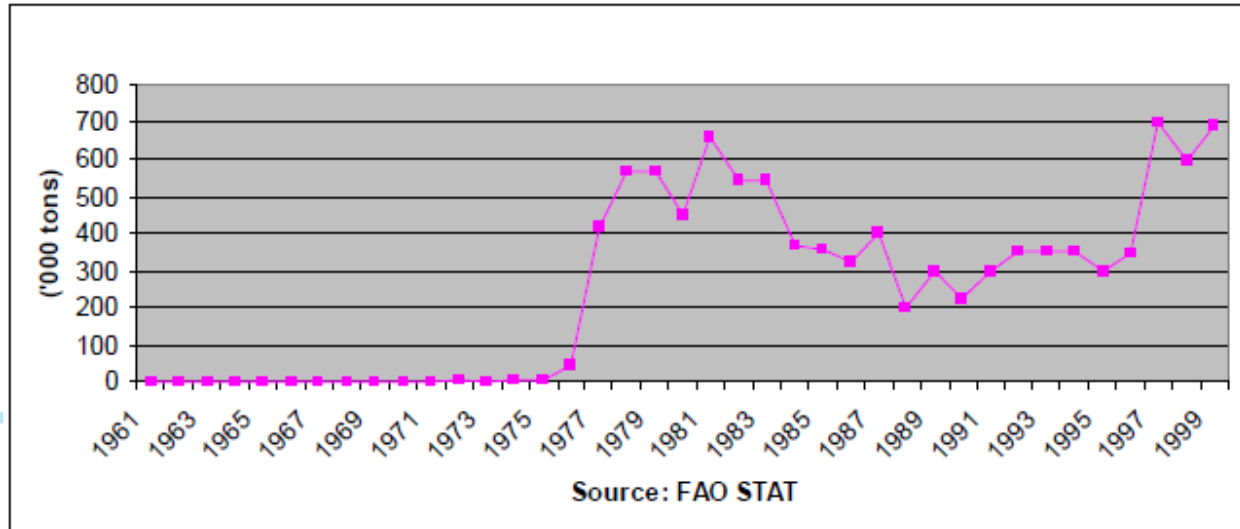


Rice Imports

Through rice contributes a significant proportion of food, requirements of the population production capacity is for below the national requirement. In order to meet the increasing demand Nigeria has a resort to importation of milled rice to bridge the gap .between domestic demand and supply. There was phenomenal rise in import since the mid 1970's. However rice import began the decline in 1981 as a result of measure put in place to check importation of the

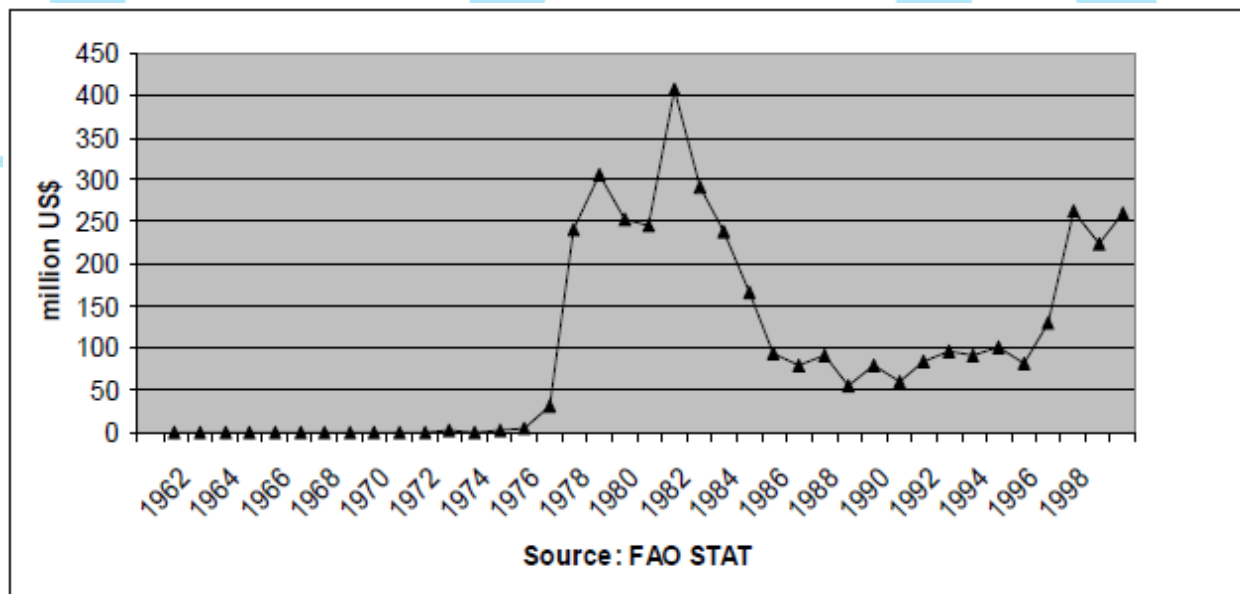
commodity. Even then the quantity imported on an annual basis was over 300 thousand tons. Imports dropped significantly from 1985 when an embargo was instituted.

Figure 3: Quantity of Nigeria's Rice Imports



Nigeria's rice import is paid for foreign currency. Given the precarious balanced of payment position of the country especially in the late 1980s, rice import became a major source concern.

Figure 4: Value of Nigeria's Rice Import



Rice Demand

The demand for rice in Nigeria has been soaring. Rising demand was partly the result of increasing population growth, increases income levels rapid urbanization and associated. The

average Nigeria now consumes 24.8kg of rice per years representing 9% of total calories in take (rice web 2001). This shows the evolution of the share of the main staples in Nigeria average food consumption in calories terms over time and highlight of the increasing importance of rice In all these, rice production has been found to be quite profitable in Nigeria. The data's motioned earlier give profitability profile a cross crops. However domestic rice is not as profitable as it would have been if there were no stiff competitions from imported rice

III.3 Estimation of Techniques

This paper has based the test of techniques on appropriate evaluation of the marketing system which should include widespread coverage of rice industry as well as changes overtime.

The only limitation is the level of literacy of the respondents. The researcher also discovered that not much have been written on rice marketing in Nigeria (and Ebonyi State particularly).

Conclusively, in my research, I discovered that Ebonyi State as the largest Rice Producing State in Nigeria still uses 85% crude method of farming and harvesting. While in Kano State, and Nasarawa State (Lafiya), Second and third Largest Producers of Rice respectively the method is modern and mechanized except in planting where the differences is due to nature of soil and rain pattern. In Ebonyi State the farmers use Nursery and transplanting method and almost all are manual; Kano State uses direct Nursery System and it is mechanized and mostly irrigation method that makes possible in some cases the creation of two farming seasons in one year. For (Lafiya) Nasarawa State, the system is both. Manual and mechanized and direct Nursery System too.

Finally the findings of this study are reliable and producer marketing data is representative of the total population of the producer traders in Ebonyi State.

In every economy, both in developed and the developing societies, creational planning, coordination, control and management of resources are stimulative.

The intuitive action and influence of capacity building initiatives and direction for administration efficiency is a unique development force for economic stability and social tranquillity in every environment.

IV. Results and Discussion

From the results as highlighted in this study, the researcher's findings in the major data analysis is focused on economics of rice marketing in Ebonyi, Kano, Nasarawa, Edo, Bauchi,

Ondo and Niger States. It attempted to describe the socio-economics characteristics of various middlemen involved in rice marketing. The study also looked into the marketing margin and the total returns in rice marketing. Furthermore, the marketing constraints associated with rice marketing was identified and discussed; and solutions to the marketing constraints were also suggested based on the analysis of data gathered in the field.

The major findings of this study can be summarized as follows:

- (a) The average age of rice producers was 39 years while that of the rice marketers was 43 years. Rice marketers however, attained some various level of education while most of the producers were illiterate.
- (b) The marketing channel for rice in Ebonyi State is one which involved few market intermediaries before the product finally gets to the consumers. At the same time, there are some consumers who buy directly from the producers. It is a fact that the longer the marketing channel the more the marketing margin.
- (c) Insufficient transport and high transportation cost in the study area was attributed to lack of feeder and all season roads. It is only on market days that some commercial vehicles ply some parts of the study area.
- (d) Other infrastructural facilities to promote the marketing system in rice were also inadequate. Such facilities are associated with storage, processing and credit. It was reported that some of the rice produce were lost as a result of inadequate storage facilities like storage chemicals to preserve the rice against insects and rodents. The cost of erecting storage house and buying storage chemicals are expensive for many producers and marketers to afford.
- (e) The mode of measurement of rice was not uniform and was poor. This accounted for the price variations at various sale points.
- (f) The market information about rice was inadequate. This inadequate market information accounted for price variations in the existing markets. The implication of this is that some consumers sale at a higher price than their counter parts in other markets of the same quantity and quality of rice.
- (g) The net profit obtained from production and sales of rice in Ebonyi State for the period of study was of Economic value.

This study has shown that rice production and marketing is profitable. Going by the result of Table 5 on total cost and total returns, it is clear that the marketers made a modest profit. This could be seen from the difference between total revenue (264.00/100kg) and total cost (1807.95/100kg) which was 833.05. The constraints associated with rice marketing in Ebonyi State have been highlighted. One could therefore conclude that if the problems mentioned in this study were solved, profit accruing to producers and marketers of rice in the study area and in Ebonyi State would increase considerably. It also gives a flash light of the economic importance of production and marketing of rice in Nigeria.

IV.1 Recommendations

Lack of institutional and infrastructural facilities and the way in which the existing market imperfection affects the marketing of rice have been identified in this study. Since the production of adequate food supply in Ebonyi State and the nation generally is of great importance, the need to promote the production and marketing of rice cannot be over emphasized. In order to achieve this objective, the following suggestions based on the research findings in the study area, are made available

- (i) Mechanized and irrigation method should be introduced by Government to make the business of Rice farming/production and sales/marketing an economic focus point in Ebonyi State.
- (ii) All seasonal feeder roads linking non-isolated villages should be developed and/or rehabilitated to ensure easy evacuation of rice produce for effective distribution. This will help to reduce transportation cost.
- (iii) Adequate storage facilities should be provided. Such facilities like storage chemicals, storage houses and the provision of market stalls for marketers. The provision of these facilities will help to reduce storage losses that might be caused by insects, pests, and would at the same time guarantee the supply of rice throughout the year.
- (iv) Agricultural training workshop in rice production and marketing should be used from time to time to educate producers and marketers on storage and distribution processes.
- (v) Government should make available Agriculture Credit facilities to both producers (rice farmers) and marketers. Such credit is necessary for effective production and marketing of rice.

Wealth grows wherever men exert energy, opportunity is also a goddess who wastes no time with those who are not prepared. Wealth is like a tree that grows from a tiny seed, and, the sooner you plant the seed of wealth the sooner shall the tree grow. Every economic system tries to anticipate and then meet human needs through the production and distribution of goods and services the research findings, discussions and recommendation were as contained in the review of related literature.

V. Conclusion

This paper re-examines the relationship between the assessment of volume of rice production and control of marketing, pricing and distribution. It is pertinent to take notice that one of the major result of my finding in this research work is that apart from our petroleum products; the rice production and marketing as a means of foreign exchange earning for Nigeria can also place us (Nigeria) very high on the comparative advantage of the cash crops of our country's economy. And therefore, various states, and the Federal Government is called upon to take Agriculture more serious especially at the subsistent level and more so on rice production and marketing.

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