EMPIRICAL ANALYSIS OF ASSOCIATION OF RICE MARKETING FACTORS IN IGBEMO REGION, NIGERIA

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Abstract

The distribution of rice in Igbemo region depends on the ability of the marketer to satisfy the complex web of purchases and sales by a diversity of household types. This study examines the complex linkages between factors that affect rice marketing in the region. Seventeen (17) markets were randomly selected in the study region in six (6) Local Government Areas (LGAs). Two hundred and ninety one (291) respondents were interviewed, constituting a total census of the local rice sellers in the selected markets. Using the Biserial Correlation test of the marketer's variables, the study discovered strong relationships between marketer's; (i) income, (ii) location, (iii) operational scope, (iv) mode of operation, (v) expenditure (vi) nature of marketing, (vii) level of availability of the rice, and (viii) price. Policy suggestions are offered based on research findings.

Keywords: Rice, Marketing, Consumers, Igbemo, Region.

1.0 Introduction

Rice constitutes the principal food of half the human race (Encarta, 2004). It is a staple food in many developing countries (Hauser, 2003), and indeed, the common food in Ekiti State, Nigeria. In the State, the neighborhood market is the major consumer market for the product. In most traditional societies, the market is the households purchasing point for basic goods and daily necessities at relatively cheaper prices than the retail shops. It becomes the target of this study because, it is the designated and legalized location for buyers and sellers to meet (Omole, 2002), and a place where households exercise high demand for consumer goods (Powell, 1993).

Igbemo is one of the major rice producing towns in this area on which the rice marketers rely heavily for supplies. Two reasons account for this. First, of all the rice producing towns in Ekiti State (Ijero, Ikole, Igbemo) Igbemo is the closest to the State capital where it attracts the highest demand for its rice. Second, the town produces relatively higher tonnage of the rice (3.7 tonnes per hectare), than the 1.5 tonnes per hectare recorded as the highest productivity for the entire state (NISER, 2002). Despite the seemingly bright employment and poverty reduction potentials of rice marketing, low income is prevalent in the town and its catchments. Consequently, majority of the rice traders can not conveniently make the product available to consumers at the right time, at a profit margin required to keep them in operations.

Rice is significant to the economy of many nations. It is a major source of revenue in the United States and Southern Europe; a staple diet in Japan and mainstay of the economies of China, Indonesia, Thailand and Vietnam (Encarta, 2004). In sub-Saharan Africa, West African is the leading producer and consumer of rice (WARDA, 1996). Rice is a staple crop throughout West Africa, especially in Cote d'Ivoire, the Gambia, Guinea, Guinea Bissau, Liberia, Burkina Faso, Senegal and Sierra Leone (NISER, 2002). In Senegal, for instance, rice consumption now exceeds 70 Kg per capita, per year, having replaced millet as the most important staple food in urban households since the 1970s (Bruntrup, 2006). In Bangladesh, a 2Kg bag of rice now consumes almost half of the daily income of a poor family (Ugwu and Adepetun, 2008). The average Nigerian consumes 21Kg of rice per year (WARDA, 2002). However, the rising demand for rice makes it a significant food item in the marketing scene.

Rice marketing is the performance of all business activities in the flow of paddy and milled rice from the point of initial production until they are in the hands of the ultimate consumers (Ihene, 1996). Marketing of rice in Igbemo region is increasingly becoming a risky business as traders face a variety of prices, yield, and resources risks with unstable income. High importation in Nigeria exposes local production to stiff competition with foreign rice. Nigeria ranks third with Iraq (after Philippines and China) in the group of major rice importing countries in the world (Awe, 2006).

Generally, variation in prices of rice exists due to quality improvement of the product, transportation and transaction cost. Price variability increases cash flow variability; seasonality and unpredictable nature of production also allow little or no latitude for the farmer. If the farmer can have effective market and the right price to sell his produce, he will not be depressed and be driven out of production (Muktar, 2002).

Rice is assuming great importance among majority of the farmers in Ekiti State (NISER, 2002). Igbemo enjoys national reputation for producing peculiarly tasty local rice. Nigerians prefer the local rice because of its agreeable taste and smell (Longtau, 2000). With the popularity of Igbemo rice in its catchments, a look at the marketing factors becomes imperative. The specific objectives of study are to: (i) identify the operational characteristics of the marketers in the region, (ii) examine the availability of the product for constant transaction, and (iii) determine the investment structure of the marketers relative to their income and expenditure.

2.0 Theoretical Base

Marketing is the management function which organizes and directs all those business activities involved in assessing and converting customers purchasing power into effective demand for a specific product or service and in moving the product or service to the final customer or user so as to achieve the profit target or other objectives set by the company (Kolawole, 2005, Sobotie, 1989, McCarthy, 1960) or the trader. Put succinctly, it is an organizational function and a set of processes for creating customers' relationships in ways that benefit the organization and its stakeholders (American Marketing Association, 2007).

Food is traded and marketed at local, national and international levels. The availability of food is no longer restricted by diversity of locally grown food or the limitations of the local growing season, but by marketing. This covers a wide range of activities which include processing of goods, packaging, storing, transportation and the actual buying and selling of a product (Akinbode, 2003). It also involves public relation, pricing and distribution (What is Marketing, 2010). These are operational sub-system of the marketing system which provide framework of participation by the marketers at designated places and at definite time periods. Marketing is so important to any trader or company in order to place a product or service in the hands of potential customers. To many people, therefore, the word 'marketing' simply implies sales. The belief of most marketers is that profitable sales and satisfactory returns on investments can only be achieved by identifying and satisfying customers' needs and requirements. As participants in the rice marketing scene they interact under constraints – technical (economic) and ethical (social) – and create the transactions or flows which result in exchange and consumption.

Location choices of the traders (marketers) are driven by market and infrastructural factors (Lopez and Henderson, 2006). The important attributes of a market are convenience of location, range of services and availability of a product. The variation in purchase and sales, for instance, by different households is a reflection of comfort derived at transaction points and the quantity of a product made available for consumption by the marketers. Conceptually, infrastructure traverses series of human activities for a variety of purpose notably work, shopping, housing, health care delivery, transport and communication etc. Social infrastructure covers social welfare services generally (education, health services, information and town and country planning), while economic infrastructure (energy/power, market, water, transportation and communication services) relates to the hard-core economic activities (Ayodele, 1996).

Success of infrastructure as a technical and social service is under stress in African countries, including Nigeria (Abbot, 1996). The reality in Nigeria is chronic shortfall in resources needed to provide and maintain these infrastructure by government as enormous pressure in utilities and services has frayed the urban fabric, thereby complicating the problem of maintaining a healthy marketing environment (Owei, 2003). Customers (consumers) are people with individual needs. With increased variation in income, customers could be selective and buy only those products that precisely meet their changing needs (The Marketing Concept, 2010). Successful marketing, therefore, depends on careful research and thorough analysis, of the needs of customers, to know how a goods or service can be made available and sold at a profit. Rice is a basic food. The rice marketer is focused in this study as the key player in actual marketing. The correlation of their operational characteristics within the study region will reveal the level of rice marketing efficiency relative to the consumer needs in this area.

3.0 Conceptual Framework for the Study

Actual marketing implies selling and buying, and the movement (transportation) of a good to and from the points of sale to the buyers precincts (Akinbode, 2003), which, in reality, are the urban and rural markets.

The marketing of rice is always complex and involves four distinct stages (Aderibigbe, 1997). The first stage is production through harvesting. Stage two is movement from the farms to processing centers, while stage three consists of moving the milled rice from rural processing areas to urban consumption centers. The fourth stage covers wholesaling and retailing in urban centers and the sub-urbs. Rice is usually moved from rural and urban areas, but more to urban markets where there is increased population with corresponding increase in demand. The markets in South-Western Nigeria are predominantly periodic and perform significant exchange and distributional roles. Explanation for the evolution of the periodic markets lays in the limited volume and range of goods and services that can support daily market operations (Akinbode, 2003). The marketers in the region, often need sufficient built-up of effective demand, and sometimes of supply, for any commodity. Households in the environment of each market, as well as wholesalers and retailers constitute the market population. The availability, choice and pricing of rice products at the market centers are important factors that attract consumers' patronage.

One major view that forms basis for this study is the term 'region'. It is essentially used to aid the segregation of spatial features based on specific criteria. The concept *Igbemo* region, for instance, is adopted in this research to provide deductive explanation for the importance of *Igbemo* in a particular region. A region is an area within which homogeneity prevails in terms of one or more categories of phenomena (language, religious preference, occupation, income, climate, relief etc), or an environment having functional coherence in terms of several interrelated interacting categories of phenomena (Sule, 2000). The rice marketers are already a source of support for food supply in the study area, and the range of exposure to rice business, has generated a network of linkages and economic relations among human communities in a regional setting. Igbemo region, therefore, appears a relevant classification in this study as it relies on specific criteria to identify a particular geographical area.

A major constraint in identifying the region, however, is determining the geographical limit. Such indicators as location of rice marketer, source of rice sold and distance to source can be used in delineating the targeted region. This study, therefore, was guided by the Breaking-Point Model (BPM), "which is derived from the Reilly's law of retail gravitation (Morenikeji, 2006). The gravity model, predicts how trips generating at a particular centre will be distributed to other centers. The formula is given as

$$T_{ij} = G * \frac{P_i P_j}{d_{ij} \lambda}$$
 Eq (1)

where T_{ij} = flows from place i to j, P_i and P_j = measure of mass (population) of place I and j, d_{ij} = distance between p and j, and λ = best fitting distance exponent, usually set between 1 and 3.

The breaking point model which developed from this rule, determines the market areas often captured by a production centre. As a tool of economic analysis, it is often applied to show how people shop at different centers and the conditions under which such occur. This is mathematically expressed as:

$$B_b = \frac{D_{ab}}{\sqrt[1+]{\frac{P_a}{P_b}}} \qquad \text{Eq. (2)}$$

where B_b = Breaking point between settlement A and settlement B (in kilometers from settlements B), D_{ab} = Distance between the settlement A and B in kilometers, P_a = Population of settlement A and P_b = Population of settlement B.

The assumption of the model is that both the demand and supply of a good are high at the centre of production. The subsequent extension of supply outside the production centre allow further development of new trading areas, each grouping around separate market centers which are the main trade points. With distance from a particular trade point, the intensity of trading declines to a level (breaking point) where that of another trade point begins. In Ekiti, the commodity seller prefers the market place to shops for the sales of household goods. This is a trade point for outputs or final goods and services (consumer goods and services) where households respond to a price fall by demanding more (Powell, 1993). It is possible to determine major areas of trading of the local rice from Igbemo using this model. The usual constraint, is determining the application to events of spatial dimensions. Whether it is better applied to the rural, city or regional level remains a crucial question. What is important, however, is the clear specification of the variables at any given level so that the function of a trade point actually manifests.

4.0 Materials and Methods

4.1 Research Locale

The study region covers six (6) Local Government Areas (LGAs) in Ekiti State. These are: Ado, Irepodun/Ifelodun, Ido/Osi, Gbonyin, Oye and Ikole LGAs. It lies on the rain fed upland environment where rice is increasingly cultivated in the South-Western Nigeria. The study region locates in the north-eastern part of the state where it shares boundaries with Illejemeje and Moba LGAs as well as Kwara State in the North; Ekiti –East LGA, Kogi and Ondo State in the East; Emure, Ise-Orun, Ikere and Ekiti-South West in the South, and Ekiti-West and Ijero in the West (Fig. 1). Out of the total sixteen (16) LGAs in Ekiti State, the study region (6 LGAs) accommodates about 44.2% of the state population, who have the potential for strong inter-connections and well-established ties on rice business with Igbemo.

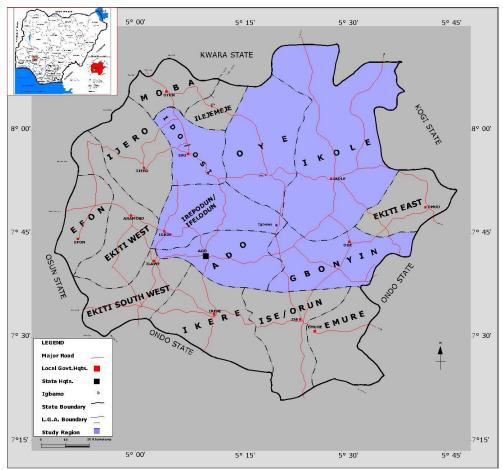


Fig. 1: Igbemo and the Region of Study in Ekiti State Source: Authors' finding, 2011.

4.2 Database Description

Igbemo rice marketers are the target population in this study. A multi-stage random sampling technique was employed in selecting the sample. The first stage involves a purposeful selection of the six LGAs in Ekiti State, which, re-iteratively is the major marketing areas of the local rice. The second stage involves random selection of seventeen (17) residential quarters (wards) from he existing sixty nine (69) wards, representing 24.6% of the total wards in the region. Each ward is a clearly defined political unit by the Independent National Electoral Commission (INEC). This constitutes a neighborhood, for which there is a common market of the neighborhood rice marketers. The number of wards selected in each LGA is proportional to the total number of wards in the entire study region. In a selected market, a census of the rice marketers was conducted which gave a total count of two hundred and ninety one (291). This approach was adopted because, traditionally in Ekiti, marketers who specialize on the same item often cluster together in the market place. In the neighborhood market, however, this number is typically small and convenient for a total survey.

The variables that were employed in the analysis are: income level of the rice marketer (INCOME), the location of marketing activity (LOCATION), the scope of operation (SCOPE), and the mode of operation (MODE). Others include; level of availability of the rice (AVAIL), the nature of marketing (NATURE), the price of the rice product (PRICE) and the expenditure on marketing (EXPDT). These variables have been selected because of their impact on rice marketing in the region. For instance, location of activities of the rice marketers from the production centre differs widely. Of significant importance is the differing level of capital available to each marketer which defines the scope, mode, availability of the product and nature of operation. No doubt, the conditions that prevail over the spatial distribution of rice in the region will depend on these variables that relate to the marketers on both retail and wholesale scales.

A structured questionnaire was prepared and administered to the rice marketers being the target population. Findings reported herein were based on responses from the marketers sought in a pre-coded alternatives provided for close-ended questions designed to ascertain their marketing operations. Follow-up oral interview with the different categories of marketers were used to elaborate on their responses and solicit additional comments not covered by the research questions. Ten final (fifth) year students of the Department of Urban and Regional Planning, Federal University of Technology, Akure served as research assistants with adequate training on how to administer the questionnaire. Only one questionnaire was administered on each marketer. Although the questions were in English, they were translated into Yoruba (the major language in Western region of Nigeria) in cases where the respondents did not understand English.

Cross sectional data were collected from sampled rice marketers with the aid of interview schedule which was found to be the most appropriate since majority of the marketers were illiterates (72.5%). The direct contact interview made it possible to retrieve the 291 questionnaires in usable form for analysis as respondents provided answers promptly and adequately with little stress of interpreting questions in the local dialect (Ekiti). Survey utilized simple stratified systematic sampling techniques to select cases, while the data generated were subjected to statistical analysis using descriptive measures such as frequency distributions and Biserial Correlation test to determine the resource use efficiency of rice marketers in the area.

5.0 Results and Discussion

5.1 The Rice Marketing Chain

In the markets are several key players namely: the wholesale trader, the retail trader, the transporters and regulatory bodies. Some of these key players have associations such as the Association of Rice Marketers (ARM) comprising mainly wholesalers who are registered with the Ekiti State Ministry of Commerce in two categories. That is, the Women Cooperative Multi-purpose Union Limited (WCMU) at the State government level, and the Women Cooperative Societies (WCS) at the local government level. Others include the National Union of Road Transport Workers (NURTW) and the informal associations of the retail traders.

Notable among the associations are the Neighborhood Rice Marketers (NRM) and the security outfits known as Market Regulators (MRs) which are organized vigilante groups that monitor price of rice and the common unit of measurement (*congo*) especially at the urban markets. The major regulatory bodies in the markets, however, are the local councils that collect rates from the marketers, the market associations and the NURTW. This study focuses on the rice traders who are central to the marketing processes. Understanding the efficiency of their operations within the established framework will help to determine the geographical distribution of *Igbemo* rice in the study area.

5.2 Marketers' Operational Characteristics: Altogether, there were four hundred and five (405) local rice sellers in the sampled markets who sourced the product from different locations (Igbemo – 291 (71.9%), Ikole – 46 (11.4%), Ijero = 25 (6.2%) and outside Ekiti State = 43 (10.6%)). The homogeneous nature of the region with high demand for *Igbemo* rice, explains the focus on the 291 marketers who have more transaction with the regional consumers. Generally, most of the rice marketers are females (93.7%) who specialize in trading (91.1%). Majority (71.4%) prefer to locate in the neighborhood markets and operate periodically (66.3%). In the region, rice marketers, indeed, assemble the product in reasonable quantities for the next market operation. Some also locate in shops (19.6%) and homes (5.2%), while a few (3.8%) hawk the rice. Currently, many of them (67.0%) earn between $\frac{1}{1}$ 50, 000 and $\frac{1}{1}$ 100, 000 (\$333.3 – 666.6) annually, and are married (72.9%).



Fig 2: A Cluster of Local Rice sellers in Bisi Market at Ado-Ekiti. In Ekiti State, the marketing industry is rigidly organized around women as they engage more in mobile trade. They patronized the rice millers in Igbemo and extend the sales of the product to local and regional markets. Constrained by limited access to formal education, their activities still lack modernization. This is demonstrated in the manner they display the milled rice on mats and nylons on the ground in market places – another major source of contamination.

Source: Author's fieldwork, 2011.

Generally, women occupy low- pay jobs and work in the informal sector occupations such as street vending and market work (Ashford, 2001). Their involvement in food distribution, however, is to gain economic independence from husbands to meet various obligations to family and friends (Makinwa-Adebusoye, 1991).

A lot of the marketers fall between 31-45 years age group (47.4%)- an indication that bulk of the marketers is of active and virile age that can cope with marketing which is labour intensive. Conversely, a sizeable majority (77.3%) operate within the respective hometowns where the markets are located; 17.9% sell within the state and 4.8% to other states. Historically, the study area is noted for local rice production, which the marketers are always willing to deliver to the various local markets. About 97.9% of the marketers specialize mainly on the sales of the local rice, which 73.8% claimed to be readily available for their effective operations.

The rice traders buy in different measures and weights. The big metal basin (20 - 22Kg) used by the wholesaler and the small-rubber basin (1.2 Kg) otherwise called *congo* cost \$\frac{1}{2}\$, 500 (\$23. 3) and \$1200 (\$1.3) respectively, for the good quality local rice. Generally, the *congo* which is used by the retailers, is the common unit of measurement. The price increases sometimes to \$\frac{1}{2}\$50 (\$1.7) and above, with distance from Igbemo at few locations (10.0%). The highest percentage (52.5%) of the traders expend less than \$\frac{1}{2}\$12, 000 (\$80) on marketing, followed by \$\frac{1}{2}\$24, 000 (\$160) (17.9%), above \$\frac{1}{2}\$3600 (\$240) (10.7%), exactly \$\frac{1}{2}\$36, 000 (10.8%) and \$\frac{1}{2}\$12, 000 (7.9%). Expenditure often covers cost of purchase of the rice product and other marketing inputs- labor and transportation. Remarkably, price ranges occur based on grades of rice from the mill, the variations in marketing inputs at the various destinations and the season of the year.

5.3 Markets' Characteristics and Price Setting: The markets in the study region vary in size (land area covered and population) and intensity of patronage. Generally, majority of the settlements in Ekiti are rural, hence, periodicity of rice marketing predominates "because most of the people who bring local products for sale participate in either their production or processing" (Nwafor, 1982). The farmers in Igbemo sell the paddy at relative cheaper price to the processors who convert to rice and sell again to the wholesale traders from the rural assembly markets. These wholesalers bulk the rice in such markets for the urban markets which serve larger area of small but significant retailers who network the rural communities.

The retailers often decide the local price for the rice, considering the cost of procurement, quality of rice to be sold, time of the year, availability of close substitute and other forces of demand and supply. The wholesale price on the other hand, is determined by the level of demand from retailers and consumers as well as supply from the producers.

Other ancillaries such as extra expenses to police and local government check points are built into the transport costs and invariably into marketing cost. Price differences, no doubt, occurs but in relation to issue of quality and standards depending on the traders informal and local perspectives. Color, quality and distance to supply markets in Igbemo determine the price of rice. In the urban market, for instance, fine textured rice attracts a better price than coarse type with chaffs or broken grains. This price variation hardly occurs in the rural markets where the fine textured rice is scarce. Consumer preferences therefore, become major determining factors in the markets which are not the same in terms of price differences and fluctuations.

The mean of the distance of consumer markets from Igbemo was put at approximately 4.35, translating to about 17kilometre-radius. At this range, marketers are always willing to set a common price as journeys to be made will be short and less expensive. More importantly, the marketers are conscious of consumers' familiarity with the *congo* for which they prefer to retain a common price to attract customers. A close examination of the *congo*, however, revealed slight variation in their sizes from one market to another, especially with distance from Igbemo. The profit seeking behavior often leads the marketer to adopt the strategy of heating or trimming the plastic *congo* so that they can recover the marketing inputs with some gains.

Table 1: Definition of Research Variables

S/N	Variable code	Definition of Variable	Measurement scale	Frequency	%	Mean	Standard deviation
1	INCOME	Annual income of Respondent	1 = < N50,000	29	10.0		
		•	2 = N(50,001-100,000)	195	67.0		
			3 = N(100,001 - 150,000)	42	14.4		
			4 = N (150,001-200,000)	18	6.2		
			5 = > -N 200,000	7	2.4		
			Total	291	100.0	2.24	0.81
2	LOCATION	Location of Marketing Activities	1 = Hawking	11	3.8		
		-	2 = Shop	57	19.6		
			3 = Market place	208	71.4		
			4 = Others (Home)	15	5.2		
			Total	291	100.0	-	-
3	SCOPE	Scope of Operation	1 = Within hometown	225	77.3		
			2 = Within Ekiti State	52	17.9		
			3 = Outside Ekiti State	14	4.8		
			Total	291	100.0	-	-
4	MODE	Mode of Operation	1 = Daily	98	33.7		
		•	2 = Periodic	193	66.3		
			Total	291	100.0	-	-
5	AVAIL	Availability of Rice for Effective Operation	1 = Not regular (seasonal)	4	1.4		
		•	2 = Fairly regular	29	10.0		
			3 = Just regular	41	14.1		
			4 = Very regular	217	74.6		
			Total	291	100.0	-	-
6	NATURE	Nature of Operation	1 = Retail sale	174	59.8		
		•	2 = Whole sale	113	38.8		
			3 = Merchandise	4	1.4		
			4 = Others	-	-		
			Total	291	100.0	-	-
7	PRICE	Price per Kilogram of Rice	1 = < -N 100	5	1.7		
			2 = N150	10	3.4		
			3 = N200	247	84.9		
			$4 = \frac{N}{250}$	27	9.3		
			5 = > N250	2	0.7		
			Total	291	100.0	2.93	0.34
8	EXPDT.	Average Annual Expenditure on Marketing	1 = < N12,000	153	52.5		
		Č	2 = N12,000	23	7.9		
			3 = N24,000	52	17.9		
			4 = N36,000	31	10.7		
			5 = > N36,000	32	11.0		
			Total	291	100.0	2.21	1.45

 \mathbb{N} = Nigeria Naira (\mathbb{N} 150 = 1 US\$) Source: Author's findings, 2011

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5.4 Bivariate Analysis of Marketers Variables: Operations of these marketers in the study region can be determined through casual observations in the markets. Another option, though less reliable, is to present only the opinions of the marketers about rice business using the frequency distribution of the research variables. The logic in the cross-tabulation of the specific variables is that, rice marketing activities are based on some factors (capital base, availability, scope and mode of operations) which determine price of the product and expenditure by marketers in a bid to satisfy the needs of consumers in supply. In this study, the bivariate analyses are carried out to develop an understanding of the nature of relationship between the marketer's variables and aid policy prescription.

Table 2: Correlation Estimates of Rice Marketers' Variables

Variable Code	INCOME	LOCATI ON	SCOPE	MODE	AVAIL	NATURE	PRICE	EXPDT
INCOME LOCATION SCOPE MODE AVAIL NATURE PRICE EXPDT	.000	-0.112* 1.000	0.774**** -0.026 1.000	-0.071 0.452**** -0.051 1.000	0.159** -0.208**** 0.153* -0.143 1.000	0.013 0.220**** 0.014 0.101* -0.105* 1.000	0.039 0.037 0.087 -0.110* 0.103* -0.284****	-0.025 0.248**** 0.033 0.009 -0.152* 0.767**** -0.052 1.000

^{*} Correlation is significant at 0.05 level

Source: Author's findings, 2011.

The biserial correlation coefficient reveals that income of the marketer (INCOME) is highly related with scope of operation (SCOPE), availability of the rice (AVAIL) and location of the marketer (LOCATION). Apparently, majority (80.1%) of the rice marketers' are constrained by fund. With the poor financial status, many of them are likely to minimize movement to Igbemo (the local source), and may be compelled to undertake the activity within a small confine (SCOPE) preferably in home towns. Normally, the observed level of availability of the rice is a reflection of the marketer's income. Given that about 56.0% of the regional consumers still consider the rice to be fairly available, is an indication that the marketers find it difficult to invest sufficiently on marketing inputs (purchase, labor and transportation) for more circulation. As for the location of their marketing activities (LOCATION), majority of the marketers are retailers (59.8%) and are home-based. With low income, the wholesaler can not buy in large quantities from source (Igbemo) hence, the need for rationing the rice to retailers at few locations. Basically, the employment generating potentials of rice marketing in Ekiti is explored by women (93.7%), who have limited access to fund. In most cases, the poor is usually excluded from the formal finance sector as they do not possess collateral that would make them credit worthy (Wilckey, 2006).

The location of the marketer (LOCATION) is a major determining factor in regional distribution of the local rice as it associates strongly with MODE, AVAIL, NATURE and EXPDT. Some speculations can account for these associations. High proportion of the marketers (71.4%) sells the rice in the market place. Given that, many of the marketers (88.3%) are non-residents of Igbemo, is why mode of operations (MODE) is programmed periodically in line with the market days in their home towns. Settlements in Ekiti locate at close intervals. Since majority of the rice sellers are home-based, there is always the awareness of local recognition especially within a particular service radius, which allows for the dominance of small scale nature of marketing (NATURE). The more a trader locates in many of the periodic markets around, the more likely is the possibility for multiple distribution channels and availability of the local rice (AVAIL). In this situation, visits to Igbemo will be regular with possible impact on EXPDT. The scope of operation of the marketer (SCOPE) has significant relationship with AVAIL. The traders' absolute reliance on low-income suggests why majority are unwilling to change their short-distant trading culture.

^{**} Correlation is significant at 0.01 level

^{****} Correlation is significant at 0.000 level

A typical local rice trader in the region is of the opinion that he has a group of customers with whom he can sustain very high frequency of marketing transactions within the usual SCOPE. In the state, rice is drawn from a wide source. Out of the three major rice producing towns in Ekiti (Ikole, Ijero and Igbemo), there is high patronage of *Igbemo* rice by the local rice marketers (71.9%). This explains the level of popularity of the rice in the study area. The mode of operation of the marketer (MODE) indicates high association with NATURE and PRICE. Greater percentage of the marketers, sell periodically in the neighborhood markets. In the rural region, the density of population is low with paucity of daily markets. Generally, daily markets require the existence of full-time traders (Nwafor, 1982), who are usually attracted by high patronage. Apart from Ado and Ikole, periodic sales dominate other communities with poor transportation system. With poverty on the increase, nature of rice marketing is characterized by retail sales. The consumers are familiar with the *congo* (1.2 Kg) which is the common unit of measurement, hence, the prevalence of \$\frac{\text{N}}{2}00.00 (\\$1.7) price.

The analysis further reveals that availability of the rice (AVAIL) is significantly related with NATURE, PRICE and EXPDT. The degree of production in Igbemo, however, can still be regarded as peasant as the average percapita area of land cultivated by the rice farmer (4 hectares) falls short of 5 hectares (Adeola, 2002). The seasonality of low productivity encourages the present scope of geographical operation and the predominance of retail nature (NATURE) of marketing. When there is surplus of the commodity at a market place (especially during harvest season), price tends to be relatively cheaper than the time of scarcity (planting season). This clandestine association act in restraint of the rice trade, particularly by controlling its entry into the markets. In a bid to make AVAIL possible, the marketer makes vigorous effort to increase EXPDT. Remarkably, the inadequacy of fund, unreliability and high cost of transportation make the association quite significant.

Finally, the nature of rice marketing (NATURE) exhibits very strong relationship with PRICE and EXPDT in the region. Reviewing the general evidence in this study, the average consumer has little to expend on rice with the meager income. Generally, majority of the local rice traders (84.9%) sell for \$\frac{\text{N}}{2}00.00\$ (\$1.3) per *congo* of the destoned rice without chaffs which is considered to be of good quality. Only 3.4% and 1.7% sell for \$\frac{\text{N}}{1}50.00\$ (\$1.0) and \$\frac{\text{N}}{1}00.00\$ (\$0.7) respectively. These are the poor quality rice used as animal or poultry feeds with lots of impurities. The good quality rice is rarely sold for \$\frac{\text{N}}{2}50.00\$ (\$1.7) (0.7%), usually in Ikole and environs due to long distance. Likely to dominate the thoughts of the rice marketer in the region is high patronage that will maximize profit. Because greater percentage of the population can afford the local than imported rice (\$\frac{\text{N}}{3}50 = \$2.3\$) at relatively cheaper price, and usually in bits, the retail sales continues to gain prominence. Special credit programs elude these marketers (with low income) as a result of the requirement of high collateral and other legal prerequisites of lending institutions, which are not in favor of women – the dominant sex (93.7%). This, hinders sufficient expenditure (EXPDT) required to boost their nature of operations.

6.0 Conclusion

In this study, it is evident that there are some associated factors of rice marketing in Igbemo region. The study has used the questionnaire to source for data among 291 rice marketers in the region. It has also adopted a total survey technique to investigate the various cases. Data analysis shows that;

- Location and scope of operation of marketers and level of availability of the rice product are significant to marketer's income in the region with predominantly rural communities.
- Location of the marketers is strongly related with their mode and nature of operations, expenditure and level of availability of the rice because majority of them are retailers.
- Scope of operation of the marketers determines level of availability of the rice for regular consumption by the neighborhood households within the breaking points.
- Mode of operation of the marketers associates with their nature of operation and price of rice the implication of periodic sales in a local environment where price is made constant for effective demand.
- Level of availability of rice is dependent upon the nature of operation of marketers, expenditure on rice and the price which often result in low income.
- The nature of operation of the marketers is highly correlated with the expenditure on rice and the price a caution for change of current business (retailing) orientation.

All these variables call for planning policies that are capable of enhancing the operations of the rice marketers in the study region. With the priority of rice production in Igbemo, it represents a definite agropole to be designated for a special regional level planning by the Federal and Ekiti State Government.

By this, the planning and management of specific rice marketing projects in Igbemo region will be under a proposed State District Development Commission (SDDC). Apparently, majority of the rice marketers in the region cope with their limited capital base, the reason why their operational expenses are low. In view of this, a paradigm shift to "Cooperative Fund' (CF) is advocated to empower the rice marketers and promote their enterprises financing. The CF should be initiated by SDDC; such that, a few marketers (say 4-5) are encouraged to organize cooperative societies of weekly contributions for circulation of fund among members. The SDDC can easily raise similar fund (CF) with the organized groups and co-invest in rice marketing. Through these groups, the marketers can access loans from government and international organizations under poverty alleviation programs of the state.

Periodic sales characterize the regional rice market. Observation shows that, traders in the region visit *Igbemo* only on its market days to purchase the rice from the mills. With this tradition, there is a planned and regulated arrangement for the sales of the commodity by a processor-turned-marketer and emergency sellers at source. Considering the artificial scarcity associated with this practice, an efficient Rice Marketing Centre (RMC) needs to be established by the SDDC as designated depot for receiving the milled rice in Igbemo for discharge to organized marketing cooperatives. These groups will eventually pass it to the regional markets (RMs) for the urban and rural markets in the sub-regions. The RMC will surely serve a multi-purpose approach. First, it will ensure the regular flow of rice within *Igbemo* region with a change of orientation in the mode of operations of the marketers. Second, it will enhance the location and scope of operation of marketers, thus, allowing free entry of the rice into inter-regional trade in substantial quantities.

In a further effort of the SDDC to improve the nature of marketing for greater efficiency and effectiveness, a Regional Market (RM) development is desirable in Igbemo, Ido and Ikole to increase availability of rice in the region. Already, the regional market in Ado (Bisi market) records the highest patronage by the rice marketers (14.43%) out of the seventeen (17) sampled markets. The new marketing infrastructure to be provided by Ekiti State Government through the SDDC will constitute a modern market within the framework of regional communities that will attract and receive marketers from urban and rural areas of the region and beyond. Marketers' operations in the region depend heavily on seasonality of rice production in Igbemo. On this note, the SDDC has the duty of mechanizing rice farming operations at the agropole with irrigated-rice farming system in a collaborative effort with the national agency in the state (Benin – Owena River Basin Development Authority – BORBDA) to convey irrigation water from existing rivers to the farm lands through canals. This will encourage all-year-round cultivation for regular supply of rice and steady market operations.

To facilitate spatial distribution of the rice at the current price, improvement of transportation infrastructure in the region by the State government through the SDDC becomes a priority. Ado - Afao - Igbemo road is the only preferred route by most marketers in this area because of the good condition. Although, it is the shortest to Ado (State capital), it turns out to be the longest to Ido-Osi, Ode, Oye, Igede and Ikole which are other major subregional centres. Shorter routes to these centers are in poor conditions, and are often abandoned by transporters. Rehabilitation of these routes with fine-grained modified grid of lanes will maximize access, not only to Igbemo, but within the region. With free flow of traffic of traders, availability of the rice will be increasingly possible at various destinations. Post-harvest losses, of course, will greatly diminish as efficient transportation system exists to boost domestic rice marketing.

References

Abbot, J., 1996. Sharing the City Participation in Urban Management, Great Britain, Earthscan Publication Ltd.

Abiola, D., 2006, July 30. Lagos Mega City: On the way to Recovery, Sunday Punch, 2.

Adeola, C., 2002. Analysis of Economic Efficiency of Male and Female Rice Farmers in Ekiti State, Nigeria., Nigerian Institute of Social and Economic Research - NISER, Monograph, Series 15, 2002.

Aderibigbe, D., 2004. June 28. Rice, Building Materials to Cost More, Nigerian Tribune, 1.

Akinbode, A., 2003. The Effectiveness of Market Strategy in Regional Planning and Development, Journal of Urban and Environmental Research, 3(1): 1-7

American Marketing Association, 2007. What is Marketing, Retrieved from

http://www.dur.ak.uk/communications.office/marketing/ on 10th February,2010.

Awe, O., 2006, May 20. Ban on Rice Importation Depresses Global Trade Nigerian Punch, 3.

- Ayodele, S., 1996. Development abd Management of Utilities in Nigeria, CASS Monograph, Lagos Malthouse Press Limited, 9.
- Bruntrup, M., 2006. The Rice Market in Senegal. Agriculture and Rural Development, 13 (1): 22.
- Encarta Premium Suite, 2004. Planting Rice, Retrieved on June 15, 2006.
- Hall, P., 1992. Urban and Regional Planning, London, Routledge.
- Hauser, E., 2003. The WTO Food Security and Poverty Reduction A Contradiction in Terms? Agriculture and Rural Development, Second edition, 8 - 11.
- Hoof, P. 1992. Rural Development Policy, Regional Development Planning and Decentralization in Botswana in Drakakis-Smith, D. (ed.) Urban and Regional Change in Southern Africa, London, Routledge.
- Ihene, D.A., 1996. The Marketing of Staple Food Crops in Enugu State Nigeria: A Case Study of Rice, Maize and Beans, M.Sc. Thesis, University of Nigeria, Nsukka.
- Ikporukpo, C.O., 1983. Nigeria's Regional Policies: Issues in Conception and Performance, Research for *Development*, 3(1): 63 - 75.
- Kolawole, A.R., 2003. Marketing Mix: An Imperative for Quantity Surveying Practice, International Journal of Business and Common Market Studies, 3(1): 21-22
- Longtau, S.R., 2000. Multi-Agency Partnership in West African Agriculture: A Review and Description of Rice Production System in Nigeria, Monograph published by Ecosystem Development Organization, Jos, 47pp.
- Lopez, R.A. and Henderson, N.R., 2006. The Determenants of Location choices for food Processing plants, *Agribusiness*, 5(6): 619-632
- McCarthy, J.C., 1960. Basic Marketing: A Managerial Approach, Homewood, Richard D. Irwin Inc
- Morenikeji, W., 2006. Research and Analytical Methods for Social Scientists, Planners and Environmentalists. Jos, Jos University Press Ltd, 106.
- Muktar, M., 2002. Commodity Market of Nigeria Debt Management Office, Abuja Personal Communication.
- NISER, 2002. Assessment of the Economic, Social and Environmental Impact of Rice Production in Nigeria within the Trade Libralisation Framework, A Research paper, 93pp.
- Nwafor, J.C., 1982. Marketing System and Periodic Market, Nigeria in Maps, 114.
- Okafor, S.I., 2004. Regional Development Planning, in Agbola, T. (ed). Reading in Urban and Regional Planning, Lagos, Macmillan Nigeria Publishers Limited, 38.
- Okpala, D.C.I., 1987. Regional Planning and Regional Plans, in Faniran, A. et al. (1987) Urban and Regional Planning Policy Formulation in Developing Countries, Ibadan, Ibadan University Press.
- Omole, F.K., 2000. A Comparative Analysis of Spatial Distribution of Market Centres in the Development of Osun-State, Nigeria, Ph.D Thesis, Federal University of Technology, Akure.
- Owei, B.O., 2003. Participating Approaches to Urban Infrastructural Development and Management: Policy Implications and Challenges, Proceedings at the 34th Annual Conference of the Nigeria Institute of Town Planners, held at Abeokuta, Nigeria, 22 - 24 October, 2003, 4-18
- Powell, R., 1993. Economics for Professional and Business Studies, Second Edition, Essex Progressive Printing (UK) Limited, Leigh-on-Sea, Essex.
- Schall, N., 2000. Regional Development Planning in Kenya and Nepal, Agriculture and Rural Development, 2, 50.
- Sobotie, I.O., 1999. Marketing, an Imperative to Quantity Surveying Development, The Quantity Surveyor, 26: 43 56
- Sule, O., 2000. Paradigms of Regional Development Planning in Africa: Theory and Practice, Calabar, Prathel (Nig.) Enterprises, 40.
- The Marketing Concept, 2010. The Marketing Concept, Retrieved from http://www.netmba.com/marketing/concept, 10th February, 2010
- Ugwu, E. and Adepetun, A., 2008, April 23. Food Price Crisis: Nigeria Braces Up, The Guardian, 27.
- WARDA, 1996. Rice Trends in Sub-Sahara Africa, Second Edition, WARDA, Bouake.
- WARDA, 2002. Nigeria Potential in the Rice Sector, WARDA and the Role of Rice in Nigeria, News Release, 4.
- Whang, In-Young, 1988. Social Services Programmes for the Poor in a Newly Industrializing Country: Experience in South Korea in Rondwell and Cheoma (eds) Urban Services Developing Countries, London, Macmillan press 147 - 174.
- What is Marketing, 2010. What is Marketing? Retrieved from http://www.tenonline.org/art/mml/9301.html. on 11th February, 2010
- Wilckey, A., 2006. Microfinance A Magic Weapon for Fighting Poverty, Agriculture and Rural Development 1, 3.