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Assessing the Significant Factors influencing the Location of Rice Marketers in Igbemo Region, Nigeria

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Abstract

This paper reports the locational factors impacting local rice (Igbemo rice) marketing in Ekiti State, Nigeria in the context of African regional requirements for food security and economic development. 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, representing total census of the local rice sellers in the selected markets. The study employed the multiple linear regression model for data analysis. Marketer's mode of selling, price of rice, income of the marketer and expenditure on marketing are crucial locational factors impacting rice marketing. The paper explores spatial distribution of rice as a staple food around a production centre in Nigeria. Based on the significant role of the marketer's location in the distribution processes, it offers useful planning policies, in particular, marketing centres, good transportation infrastructure and establishment of micro-credit unions that can enhance the revenue base of the traders. The paper makes recommendations geared towards improving rice marketing business in the region.

Keywords: Rice, Marketing, Location, Region, Igbemo-Ekiti, Nigeria.

1. Introduction

Marketing is a major activity in the rice production system. It involves a sequence of production actions from the harvesting of paddy rice to milling and ultimate sale, "when it is priced, promoted and distributed to consumers" (Brett, 2009). In Ekiti State of Nigeria, almost every household – rural and urban – consumes rice as an important staple food. The main transaction points for the product are the neighborhood markets, which rely heavily on supplies from major rice producing towns in the state. However, the variation in rice purchase and sales by a diversity of household types are a reflection of the quantity made available by the rice marketers.

Igbemo-Ekiti has a national reputation for producing peculiarly tasty rice. Of all rice producing towns in Ekiti State, it controls 83.6 percent market area and enjoys the easiest linkage with Ado-Ekiti (State capital) where the product attracts highest demand. Despite the seemingly bright picture of the employment potential of rice marketing in its catchments area, some factors militate against traders' abilities to locate in the right place as convenient as possible and secure profit margins that can keep them in marketing operations. As an informal sector, the scope of operations of the marketers is often small, as many are home-based.

Location, therefore, appears to be a problem that is threatening marketing and indigenous growth of rice production in the targeted region. Rice production, which dominates the economic base of this area, has not facilitated entrepreneurial activities to a level required to improve the quality of physical infrastructure and promote greater standard of living of the regional population. In view of this, research is needed to answer some critical questions on locational parameters of rice marketing. These questions are: (i) what is the breaking point for the product in the study region? (ii) Is the location of rice marketers in the region, a product of complex factors which are deeply rooted in regional policy, culture, financial ability of traders or infrastructural provision? The research, therefore, seeks to reveal basic information on the location options of the local rice marketers, the scale of transaction (wholesale or retail), the availability of the product for constant transaction, and investment structure of the marketers as determined by their income levels, expenditure and assistance by relevant institutions or organizations.

2. Conceptual Framework for the Study

2.1 Research Purpose

Rice is the world's most important food product (Bruntrup, 2006); indeed, a common food in Ekiti State, Nigeria. It is the major crop in Igbemo-Ekiti, but in reality, the location of the rice marketers frequently determines availability of the product in its region of influence. Marketing of rice provides employment opportunities, allows food supply and generates income for regional growth and food security. However, the current scope is small for regional consumers' needs, the development of entrepreneurship, and sufficient mobilization of domestic savings.

At the global and national levels, there have been growing interests in the identification and encouragement of development strategies that are environmentally and economically sustainable. Consumers are one of the main drivers of sustainable marketing strategies (Belz and Schmidt-Riediger, 2009). As for rice, the dramatic increase in the price over the years has generated a new interest in the workings of markets and their improvement (Moser, *et al*, 2009). The aim of this paper is to examine locational factors affecting marketing of rice in the study area for the purpose of expanding the economic potentials of the region for development.

2.2 Contextual Scope

Marketing of rice in Nigeria can be classified into two broad categories - local and imported rice marketing, based on source of the rice supply (NISER, 2002). However, this study is concerned mainly with local rice marketing. Rice is cultivated in major agro-ecological States in Nigeria, namely: Kaduna, Niger, Benue, Taraba and Ekiti where Igbemo rice is popular. In most product categories in most countries, there are strong local brands reflecting local taste that coexist alongside global brands (Quelch, 2009). While preference for rice as a staple meal is generally on the increase nationally, the expanded local output is geared partly towards meeting the increased household consumption needs of the rice farming households and their immediate rural communities where the consumption orientation is changing (NISER, 2002).

This study is limited to the spot markets for a basic food staple and activities in six Local Government Areas of Ekiti State that depend heavily on Igbemo rice for home consumptions. In recognition of the potential of markets as engines of economic development and structural transformation (Boughton *et al*, 2007), the participatory roles of the marketers in food supply and local economic development of their region were investigated. Their location preference, income level, scope, mode and nature of activities as well as operational expenses constitute the scope of this research.

2.3 The Regional Delineation Model

The term "region" is essentially used in this study as a model for segregating spatial features based on specific criteria. The region is seen in two folds; "it can be an area within which homogeneity prevails in terms of one or more categories of phenomena (language, religion, occupation, income, climate, relief etc) or an environment having functional coherence in terms of several interrelated interacting categories of phenomena" (Sule, 2000). For this research, the predominating homogenous activities in rice marketing inform the delineation of the research area.

The demarcation of the study region was also guided by the breaking-point model which is derived from the Reilly's law of retail gravitation (Morenikeji, 2006). The gravity model, for instance, helps to predict how trips generating at a particular center will be distributed to other centers. The formula is given as;

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

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, on the other hand, helps to determine the market areas captured by a production center. 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:

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

Where B_b = Breaking point between settlement A and settlement B (in kilometres 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 model stresses that both the demand and supply of a good are high at the centre of production. The subsequent extension of its supply outside the production centre allows further development of new trading areas, each grouping around separate market centres 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 consumer goods and services where households are sure of a price fall, hence, can demand more (Basorun, 2008).

Rice marketers are already a source of support for food supply in the study area. The range of exposure to rice business, no doubt, have generated a network of linkages and economic relations which now extend to local and regional communities. The Six LGAs, therefore, were selected to constitute a region in this study because, they tend to create limit to the scope of relations with a rice production centre (Igbemo). As administrative units, they present clear-cut political boundaries that will allow for easy and unambiguous demarcation of the study area.

Still using the above model it is possible to determine major areas of trading of the local rice from Igbemo. But the usual constraint is its application to 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 that clearly reflects the function of a trade point.

3. Hypotheses

For assessing the significant factors influencing the location of rice marketers in Igbemo region, we test the following hypotheses:

H1: There is significant association between mode of operation of rice marketers and their locations.

H2: The association between location and income of the marketers is highly strong.

4. Research Method

4.1 Research Site

The study region comprises of six (6) Local Government Areas (LGAs) in Ekiti State. These are: Ado, Irepodun / Ifelodun, Ido/Osi, Gboyin, Oye and Ikole LGAs. It lies on the rain fed upland environment where rice is increasingly cultivated in the South-western Nigeria. It locates in the north-eastern part of Ekiti State where it shares boundaries with Ilejemeje 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. Out of the total sixteen LGAs in Ekiti State, the six LGAs (study region) accommodate about 44.2% of the state population.

4.2 Sampling Design Issues

The target population of this study is Igbemo rice marketers in the selected LGAs. A multistage random sampling technique was employed to select the needed sample. The first stage involves selection of six Local Government Areas in Ekiti State using the breaking-point model as earlier specified. The LGAs have been identified among others in the state as the major marketing areas of the local rice. The second stage involves the random selection of seventeen (17) residential quarters (wards) from the six LGAs which represents 25.0 percent of the existing sixty nine (69) wards in the region. A ward in Ekiti is a clearly demarcated political unit by the Independent National Electoral Commission (INEC). This constitutes a neighborhood in which there is usually a local market for the rice marketers. In

a selected ward, the existing market is picked for survey. The last stage is the selection of *Igbemo* rice marketers within the selected markets.

A census of the marketers was taken in each market, all totaling two hundred and ninety one (291). This approach was adopted because, traditionally, marketers who specialize in the same item often cluster together in market places. In the rural markets in particular, this number is typically small and countable, hence, the preference of total survey (census). Attention was concentrated on the rice sellers in the market places for some obvious reasons. Markets are designated and legalized locations for buyers and sellers to meet (Omole, 2002). They are physical places where these buyers and sellers meet to make exchanges, at negotiated and agreed prices for products (Michael, 2009). Essentially, in most African traditional societies, markets are the households purchasing points for basic goods and daily necessities at relatively cheaper prices than the retail shops.

A structured questionnaire was prepared and administered to the rice marketers. The variables that were employed in the analysis are: income of the marketers (INCOME), the area of operation (SCOPE), the periodicity of marketing (MODE) and the availability of the rice product for marketing (AVAIL). Others include the scale of marketing activity (NATURE), the price of the rice (PRICE), and the expenditure on market operations (EXPDT). They were selected because, of their likelihood to impact location of the marketers within the region. Altogether, there were four hundred and five (405) local rice sellers in the 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 why 291 marketers patronized Igbemo more than other sources. Cross sectional data were collected from sampled rice marketers with the aid of interview found to be the most appropriate because majority of the marketers were illiterates. The data generated were subjected to statistical analysis using descriptive measures such as frequency counts and percentages, and regression analysis to determine the resource use efficiency of rice marketers in the area.

5. Results and Discussion

5.1 The Rice Marketing Chain

Local rice marketing in the study area occurs in four stages. The first stage is harvesting, while stage two is movement from the farm to processing centre. Stage three consists of moving the milled rice from processing areas to urban consumption centres. The fourth stage encompasses wholesaling and retailing in the urban centre. At the commencement of the harvesting season in July, the rice marketers visit Igbemo to enter into series of contract-harvest arrangements with the farmers. In the deal, some assist the farmers to harvest and subsequently purchase their rice, while others, who had earlier supplied chemicals or capital to the rice farmers, demand payment with rice. There is, therefore, a partial involvement of the marketers in the first two production stages. Stages three and four activities take place in the market places.

As observed, rice is moved from Igbemo to both rural and urban areas, but more to urban market where there are more people with corresponding increase in demand. 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. These are 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 them are the Neighborhood Rice Marketers (NRM) and the security outfits known as Market Regulators (MRG) which are arranged on vigilante basis, especially in the urban markets to monitor price of rice and the common unit of measurement (*congo*). This study focuses on the rice trader who is central to the marketing processes. Understanding how they locate from Igbemo (the rice production centre) will help to determine how much of the local rice that is made available at different prices relative to the consumers' population in the region.

5.2 Marketers' Profile

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 within hometown (77.3%). Usually, rice marketers in the region assemble the product in reasonable quantities for the next market after a market operation. As some locate in shops (19.6%), others sell at home (5.2%), while a few (3.8%) hawk the rice. Many of them earn between ₦50, 000 and ₦100, 000 (£227.3 – 454.5) annually (67.0%), and are married (72.9%). Traditionally, women occupy low- pay and lower-status jobs, and they work in the informal sector occupations such as street vending and market work (Ashford, 2001). Their involvement in food distribution, however, is to earn a living, and improve family obligations (Basorun, 2008). A sizeable majority of the marketers (77.3%) operate within the region; 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 supply to the various local markets. About 97.9% of the marketers trade on the sales of the local rice, which 71.5% 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 ₦3, 500 (£15.9)* and N200 (£0.9)* respectively, for the good quality local rice. Generally, the *congo* which is used by the retailers, is the common unit of measurement (84.9%). The price increases sometimes to £1.0 with distance from Igbemo at few locations (0.7%). The highest percentage (51.5%) of the traders expend less than £54.5 on marketing, followed by £109.1 (17.9%), above £163.6 (11.7%), exactly £163.6, (11.7%) and £54.5 (11.0%). 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.

*** £**1= 220 Nigerian Naira (calculated at 2010 foreign exchange rates)

5.3 Rationale for Inclusion of Research Variables

The growth of population has resulted in the need to transport foods to different locations of demand. This prompts investigation into the location of activities of the local rice marketers (LOCAT). No doubt, this varies widely from the production centre (*Igbemo*). Of significant importance to this study is the variation in the level of marketers' annual income (INCOME) which defines their scope, and nature of operations. No doubt, efficiency of marketing relies on how regularly the rice is made available by the marketers (MODE). Generally, marketers facilitate and sustain the local rice business though creation of network of linkages within the local, regional and even national communities. In this context, expenditure on marketing (EXPDT) is a determinant of the rice price (PRICE) and a derivative of availability (AVAIL) to meet the marketer's location option. Notably, food prices are key determinants of income and purchasing power of the poor households (Bruntrup, 2006). The conditions that prevail over the geographical distribution of the rice in the study region, therefore, will depend on these variables that relate to the marketers on both retail and wholesale scales.

5.4 Calibration of Model of Analysis

Location is hypothesized to be affected by a group of marketing (independent) variables, expressed through a multiple linear regression model illustrated as:

$$Y = a + b_1 X_1 + b_2 X_2 \ldots\ldots\ldots\ldots b_j X_j + e \ldots\ldots\ldots\ldots \textit{(Eq.3)}$$

Where Y = dependent variable, a = the intercept value of the regression hyperplane, $b_1 - b_j$ = the partial regression coefficients, $X_i - X_n$ = the explanatory variable and e = error term.

Preference for the model lies in its ability to reveal the partial strength and if possible, the significance of the contributions of the parameters to the behavior of locational features of rice marketers in the area. Although, this model may not apply with equal efficiency all over the world, it has been found to be very efficient in providing parameters that affect the behavior of a given phenomenon. Willis (1991), for instance, used the regression model in determining overcrowding and house conditions in Ghanaian housing market. Sanusi and Salimonu (2006) adopted the same model to assess the relationship between selected factors inputs and income from yam production enterprises in Oyo state, Nigeria.

The goal of the present study is to specify factors that influence the location of rice marketers outside the predominantly agricultural region of Ekiti State Nigeria . The motivation for this study is to see if the model that had been used in various contexts, can yield comparable results in a study where the socio-economic conditions of the rice marketers are different.

5.5 Regression Estimate

From the regression analysis results, only four of the variables (MODE, PRICE, INCOME and EXPDT) impact the location of the marketers significantly. These variables were introduced step-wise into the model to get the best regression equation.

Table 1: Stepwise Variable Selection for Rice Marketers' Location in the Study Region

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Model					
1. (Constant)	1.833	0.113		16.165	.000
MODE	0 .566	0.066	0.452	8.605	.000
2. (Constant)	1.617	0.118		13.688	.000
MODE	0.563	0.063	0.449	8.884	.000
PRICE	9.996E-02	0.021	0.243	4.813	.000
3. (Constant)	1.742	0.128		13.629	.009
MODE	0.556	0.063	0.444	8.852	.000
PRICE	0.116	0.022	0.282	5.365	.000
INCOME	-0.107	0.044	-0.128	-2.438	.015
4. (Constant)	2.273	0.227		10.019	.000
MODE	0.529	0.063	0.422	8.409	.000
PRICE	0.111	0.021	0.271	5.184	.000
INCOME	-0.135	0.045	-0.162	-.3.034	.003
EXPDT	-0.121	0.043	-0.146	-2.817	.005

Dependent Variable = LOCATION

Source: Authors' Computation, 2012

The equation of best regression applying the least square algorithm is presented thus:

Y = 2.273+0.529(MODE) + 0.111 (PRICE) – 0.135 (INCOME) – 0.121 (EXPDT)

The variable MODE has the highest absolute value of beta co-efficient (table 1), thus representing the most important variable contributing highly to choice of marketer's location. Table 1 reveals that the periodicity of marketer's operations (MODE) has definite positive influence on LOCAT with a coefficient estimate of 0.529. This translates to increase in the number of locations of the marketers by 52.9% as the MODE increases by 100%. In reality, most of the rice marketers sell in the market places where they enjoy higher patronage. In Nigeria, there is a vast growing demand for food (Balarabe *et al,* 2006). In Ekiti, this occurs in the local markets which are mostly periodic. This mode is characterized by bulk sales and short period of commercial operations, thus permitting engagement of part-time traders in many of the markets. Increase in LOCAT, is anticipated as the greater proportion (52.2%) who sell the rice everyday will need to ensure adequate and regular supply of the rice product especially in communities where the demands are high.

Another relatively important locational factor affecting rice marketing is the price per kilogram. The PRICE coefficient of 0.111 implies that a doubling of the current number of consumers at the prevailing price, will lead to increase in location of marketers by 11.1%. A likely proliferation of marketing outlets will plausibly come from the increase in population of major urban centres of Ado-Ekiti, Ikole and Ijero where Igbemo rice is patronized. Two-fold results can occur from this development. More rice marketing outlets and increase in demand will stimulate production at source. Two, marketers may on the long-run diversify sales points to realize more profits and use proceeds for business growth and expansion.

The regression coefficient indicates that LOCAT will decrease by 13.5% with a 100% increase in the income of the rice marketer (INCOME). Economically, when an increase in earnings occurs, the tendency to set up large scale marketing at the wholesale level is likely, thus, leading to a reduction of outlets. Previously, services and commerce have expanded following improvements in the purchasing power of consumers (Daramola, 2004). Again, at off-season, marketers trade in other materials with an expectation of higher income which does not come from rice marketing activities.

A significant relationship is shown between LOCAT and expenditure of the rice marketers (EXPDT) in the region. Should the average marketer increase investment in rice trade by 100%, a reduction in LOCAT by 12.1% is envisaged. Majority of the rice marketers in the region are full-time traders – an indication of adequate commitment to the business. That 51.5% of them expend below £54.5, translates to an average of £4.5 monthly. Further analysis shows that many (71.4%) conduct their trades within the region. Predominantly, the marketers' expenditure cover auxiliary market services such as: transport, labor, communication and storage. In a bid to curb unnecessary expenditure that may reduce the capital base, it is plausible that the marketer may prefer to expand size of enterprise through more investment for employment of workers instead of increasing location of operations.

6. Summary and Concluding Remarks

The paper has identified some major factors affecting rice marketing operations in an important agricultural region in Ekiti State, Nigeria. The analytical model for the study has also proved efficacious in identifying those variables that influence the location of rice marketers in the region. The results call for planning policies that are capable of enhancing locational activities of rice marketing in Ekiti state. Very important for policy-making are issues of increasing the marketing frequency in the various locations, good pricing, enhancing marketer's annual income and perhaps reducing their expenditure.

The marketing structure of the rice has been predominantly local as the traffic of traders towards *Igbemo* is programmed in line with the market day in the town where the processors habitually work. With this tradition, a planned and regulated arrangement for the sales of the commodity by a processor-turned-marketer at the source evolves. Quite often, the

practice leads to artificial scarcity of the rice for daily operations. This situation calls for an efficient Rice Marketing Centre (RMC) by the Ekiti State Government as designated depot for receiving the milled rice in *Igbemo* and discharging to organized marketing cooperatives who eventually will pass it to Regional Markets (RMs) for the urban and rural markets in the sub-regions. The RMC would allow free entry of the rice into inter-regional trade at a quantity that ensures regular flow within the region.

Obviously, the local rice is demanded beyond the boundaries of Ekiti State. To enhance patronage of the rice marketers beyond Ekiti State at a price that will maximize profit, improvement of access road to Igbemo by the State government should be accorded priority. The newly constructed Ado – Afao road which links the old Afao – Igbemo road is the only good road on which most traders prefer to travel to *Igbemo.* Although, it is the shortest route to Ado-Ekiti, it turns out to be the longest to Ido-Osi, Ode, Oye, Igede and Ikole which are sub-regional centres. Shorter routes to these centres are in poor conditions, and are often abandoned by transporters. The State Government should link the sub-regions to Igbemo with asphalted lanes to maximize access to the town. The free flow of traffic will generate more trips and income for the marketer, thus, making availability of the rice increasingly possible for consumption at affordable prices. Post-harvest losses, of course, will greatly diminish as an efficient transportation system enhances domestic rice marketing.

Traditionally, only self-financing option is apparent in rice marketing within the study area. That most marketers are constrained by capital suggests the limitation to their operational expenses and productivity. In view of this, a paradigm shift to Micro- finance Trade Unions (MTUs) under the control of the State Ministry of Commerce is advocated. Through these authorized associations and micro-credit unions, the marketers can access loans from micro-finance banks and other credit facilities available in the state.

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Appendix

Definition of Research Variables:

S/N	Variable Code	Definition of Variable	Measurement scale	Freq.	%	Mean
1.	LOCAT	Spot of marketing activity	1 = Hawking	11	3.8	
			2 = Shop	57	19.6	
			3 = Home	15	5.2	
			4 = Market place	208	71.4	
			TOTAL	291	100.0	3.44
2.	INCOME	Annual Income of Respondent (₦)	1 = <₦50,000	29	10.0	
			2 = ₦50,001-100,000	195	67.0	
			3 = ₦100,001 – 150,000	42	14.4	
			4 = ₦150,001 -200,000	18	6.2	
			5 = > ₦200,000	7	2.4	
			TOTAL	291	100.0	N112,000
3.	SCOPE	Area of Operation	1 = Within the town	225	77.3	
			2 = Within Ekliti State	52	17.9	
			3 = Outside Ekiti State	14	4.8	
			TOTAL	291	100.0	1.28
4.	MODE	Periodicity of market	1 = Once a week	23	7.9	
			2 = Twice a week	52	17.9	
			3 = Thrice a week	64	22.0	
			4 = Everyday	152	52.2	
			TOTAL	291	100.0	3.19
5.	AVAIL	Availability of Rice for marketing	1 = Not available (seasonal)	4	1.4	
			2 = Fairly available	29	10.0	
			3 = Just available	50	17.2	
			4 = Readily available	208	71.5	
			TOTAL	291	100.0	3.59
6.	NATURE	Scale of marketing activity	1 = Retail sales	174	59.8	
			2 = Wholesales	113	38.8	
			3 = Merchandize	4	1.4	
			TOTAL	291	100.0	1.42
7.	PRICE	Price per Kilogram of Rice (₦)	1 = < ₦50	5	1.7	
			2 = ₦100	10	3.4	
			3 = ₦150	27	9.3	
			4 = ₦200	247	84.9	
			5 = > ₦200	2	0.7	
			TOTAL	291	100.0	N189.5
8.	EXPDT	Average Annual Expenditure on Marketing (₦)	1 = < ₦ 12,000	150	51.5	
			2 = ₦12,000	23	7.9	
			3 = ₦24,000	52	17.9	
			4 = ₦36,000	34	11.7	
			5= > ₦36,000	32	11..0	
			TOTAL	291	100.0	N13380

Source: Authors' Computation, 2012