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Effects of Marketing Constraints on Gross Margin of Local Rice Retailers in Ardo-Kola L.G.A, Taraba State, Nigeria

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Abstract

This study assessed the effects of marketing constraints on the gross margins of Local Rice retailers in Ardo-Kola L.G.A of Taraba State, Nigeria. Purposive and multistage random sampling methods were used to select twelve respondents each from five major markets in the study area, giving rise to 60 respondents. A structured questionnaire module was used in gathering information on retailers' socio-economic characteristics and constraints faced. Data obtained from completed questionnaire were organized and analyze using descriptive statistics such as frequency distributions, and percentages. Gross and net margin analyses were conducted to assess the profitability, while OLS regression model techniques was adopted to infer the effects of the constraints on the gross margin of the retailers. Results of the descriptive statistics reveal that women constituted 70% of the respondents. Those married constituted 55.0%, and those with primary education were 51.7% of the respondents. Saving was the main source of income and constituted 58.3% of the initial capital. An age range of 26-35 dominated rice retailers' age, with 41.7% of the respondents falling into this age group, while household size of 6-10 dominated, constituting 55% of the respondents. Also, the results of the regression analysis reveals that retailers' constraints in terms of cost of union fee, transportation and shop rent significantly influence gross margin at 1%, 5% and 10% levels of significance, respectively. It is recommended that since decrease in the costs of these independent variables increase gross marketing margins of the retailers, the local as well as the Federal governments and all stakeholders should rally around to reduce amounts payable as union fee, in addition to providing cheaper transportation and shop facilities to improve marketing margin and possibly increase the net income, and improve welfare of rice retailer marketers in the LGA on the long run.

Keywords: Marketing Constraints, Effects, Rice Processors, Gross Margin, Net Income

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1. Introduction

Rice (Oryza sativa) is a staple crop with a wide acceptability in most families in Nigeria. Though this is true, yet the recent flooding, insecurity of lives and properties due to incessant terrorist attacks, and bombing has affected the production and trading of rice especially in the North-Eastern part of Nigeria. Movements of tradable goods have been hampered by not only poor infrastructural state of the road network, but cost of transportation. Also, many traders and farmers are apprehensive when engaging in marketing activities (United State Agency for International Development (USAID, 2013).

Gyimah-Brempong et al. (2016) noted that rice demand in Nigeria outplace domestic production due to rapid population growth, increasing incomes, urbanization and a decline in relative price of rice. Accordingly, Nigerian Agricultural Extension and Research Liaison Services (NAERLS, 2014), rice employed over 15 million people in its value chain. She noted that Rice bran oil is used for cooking, soap making, and as carrier for insecticides and anti-corrosive and rust resistance. It is also used in the brewing industries. Rice straw is used as a source of fuel, the manufacture of straw board, for thatching and for making hats and mats (NAERLS, 2014).

Rice marketing entails all the activities involved in moving rice from the point of production to where it is needed by the final consumer in the desired form and at the appropriate time (Bassey et al., 2013). Many sellers of these produce travelled to the remote farming communities and some to other parts of the country to purchase these food items. Following this, they incurred costs ranging from purchasing cost, transportation cost, market charges, and to storage charges. Returns from sales of the foodstuff constitutes Retailers' revenue, while the difference between the total revenue and the total variable cost is termed gross margin (Dittoh et al, 1985), hence net profit is the value obtained after subtracting the value of fixed costs from gross margin. Tareke (2003), opined that marketing problems are related to knowledge of grading, market information, lack of group

marketing options (coop/unions), use of storage as marketing strategy, excessive intermediaries, price seasonality, limited number of buyers, and lack of markets.

Some of the major challenges farmers encounter includes access to reliable and affordable transportation, as well as proper storage facilities (Anang, Bäckman, & Sipiläinen, 2016). In spite of the role Rice plays in human life and its effect on the economic development of Nigeria, the effects of marketing constraints on Gross margin of local rice retailers in Ardo-kola LGA tend to be ignored. It is only when studies are conducted that profound solution can be reached. It is on this note that this study addressed the following research questions:- (i) what are the social economic characteristics of local rice retailers in the study area? (ii) What are the Gross margins of local rice retailers in the study area? (iii) What are the marketing constraints affecting local rice retailers in the study area? (iv) What effects do marketing constraints have on Gross margin of local rice retailers in the study area?

The broad objective of this research is to determine the effects of marketing constraints on Gross margin of local rice retailers in Ardo-kola Local Government area of Taraba State; while the specific objectives include to:-

(i) describe the socio-economic characteristics of rice traders in the study area;

(ii) identify the constraints affecting local rice retailers in the study area

(iii) determine the Gross margin of local rice retailers in the study area;

(iv) determine the effects of marketing constraints on Gross margin of local rice retailers in the study area;

The null hypothesis H_O tested against the alternative is that:- Marketing constraints do not have significant effects on Gross margin of the local rice retailers.

The justification of this study stems as a useful input and guide to agricultural policy makers in formulating effective commodity market policies in the state, viz a vis providing insight on constraints that militate against efficient marketing of agricultural commodities, especially Rice in the state. In addition, students and economic analysts would find the study a valuable guide to other related study areas of Agricultural Economics and a relevant source of reference by providing a great deal of information on gross margin of local rice retailers and how it is influenced by marketing constraints in within the state.

The study limits itself to the marketing activities cum constraints of local rice retailers in Ardo-kola local government area of Taraba State. Put differently, the context scope of this study is limited to finding the social economic characteristics of local rice retailers in the area, constraints of local rice retailers, Gross margin of local rice retailers, and effects of marketing constraints on Gross margin of local rice retailers.

Conceptually, the framework of agricultural marketing comprises two words, agriculture and marketing. Agriculture refers activities that utilize natural resources to attain human welfare, cutting across all the primary activities of production. Hitherto, agriculture can be conceptualized as the growing/raising of crops and livestock, financing and marketing which connotes a series of activities involved in moving the goods from the point of production to the point of consumption. Practically, marketing includes all the activities involved in the creation of time, place, form and possession utility. In furtherance to this, efficient agricultural marketing is essential for the satisfaction of producers and consumers, as well as production and consumption. Adenegan, Adeoye and Ibidapo, 2012, noted that agricultural marketing assumes greater importance in an economy when excess production from farmers are disposed off in order to earn income with which farmers can purchase goods and services not produced by them. On the other hand, Haliru and Ibitoye, (2014) described agricultural marketing as an important means for development, especially for the developing countries. It therefore suffices to state that there is every need for rice marketing system to be well structured and efficiently organized to satisfy the demand and supply of goods and services of operators, thereby promoting trade between production and non-production areas which in turn generate revenue and enhances the pace of economic development. Frimpong *et al.* (2015) defined marketing as the process of planning and executing conception, pricing, promotion and the distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives. Marketing encompasses all of the business activities performed in directing the flow of goods and services from the producer to the consumer or final user (World Bank, 2006). These activities are usually classified into six stages. These are: production, assembly, processing, wholesaling, retailing and consumption (Goyal, 2010)

2. Global Demand and Price for Rice and Cereal

According to the estimations of the World Bank, the increase in rice price has pushed 100 million people

below the poverty line. Based on the projections made by the Food and Agricultural Policy Research, the global rice demands were expected to rise up to 496 million tons in 2020 and up to 555 million tons in 2035. World cereal utilization in 2021/22 is now forecast at 2 811 million tonnes, up 2.7 million tonnes from September and 49 million tonnes (1.8 percent) higher than in 2020/21. FAO has downgraded its forecast of world rice utilization in 2021/22 by almost 1.0 million tonnes to 520 million tonnes. Despite the revision, world rice total use is still anticipated to grow in 2020/21 by 1.8 percent to reach a historical high. The increase is expected to rest on a 1.6 percent annual expansion in food use, was complemented by a 10.4 percent rise in animal feed use. Besides, FAO's latest forecast for world trade in cereals in 2021/22 has been raised by 7.4 million tonnes to 473.2 million tonnes, but still pointing to a small contraction of 0.3 percent (1.6 million tonnes) from the 2020/21 level. Following a 1.8 million tonne upward revision from September, world trade in rice is now forecast to reach 50.2 million tonnes in 2022 (January-December), up from the revised forecast of 49.2 million tonnes for 2021

Therefore, Agriculture is recognized as one of the most challenging and risky enterprises, thus maximizing long-term profitability of farm is of utmost importance to farmers' wellbeing and competitiveness as well as the related people who engaged in this business to a larger extent. (Behjat and Ostry 2013). Prices of agricultural product in different markets are largely influenced by seasonality in production, fluctuation in production and the general economic growth within the country. As such price variability becomes a common phenomenon in agricultural outputs due to stochastic nature of products. The stochastic nature of agricultural produce is heavily linked to natural factors such as weather and economic factors such as transformation in markets, length of different marketing channels, transport and other marketing infrastructure. Demand factors such as consumer habits, substitution between products and per capital income also influence prices (Katengeza, 2009; Ddungu et al., 2015)

2.1 Marketing Channel of Rice

Armstrong, 2009, referred to a marketing channel as a set of practices or activities necessary to transfer the ownership of goods and services from the point of production to the point of consumption. The length of each marketing channel is determined by the number of institutions and all the marketing activities involved in the marketing process. Deloitte (2017) noted that, industry report captured marketing channel as a period of transformation globally for the retail, wholesale and distribution practices, which necessitated adaptation and changes in firm's distribution channel strategies to suite prevailing changes in the business environment. As the marketing process becomes complex more middlemen come between the producers and consumers. Palmatier et al. (2016) opined that, channel strategy is the set of activities focused on designing and managing a marketing channel to enhance the firm's sustainable competitive advantage and financial performance. In another perspective, channel strategy is concerned with the entire process of setting up and operating the contractual organization that is responsible for meeting the firm's distribution objectives. Kotler (2003), also explains marketing channels as a set of interdependent organizations involved in the process of making product or service available for use or consumption. Most producers do not sell their goods directly to the final users; between them stands a set of intermediaries performing a variety of functions. These intermediaries constitute a marketing channel also called a trader channel or distribution channel. Marketing channel strategically links producers to buyers, influences the firm's pricing strategy, affect product strategy through banding among other roles. Based on the level of relationship between the producer of a product and the ultimate consumer, there could be three or more type of marketing channels for rice, thus.

I. The producer---- customer channel; this is where the producer sells goods or provides service directly to the customer. Here there is no involvement of an intermediary.

II. Producer--- retailer----- consumer; here the retailer buy the product from the producer and sell them directly to the customer

III. Producer--- Wholesalers--------Retailer----- consumer; here the Wholesalers purchase from the producers, and retailer buy the product from the Wholesalers and sell them directly to the customer

2.2 Marketing Margin

Marketing margin refers to the difference between finished goods that are purchased and the price at which the product is sold through the distribution channel. Marketing margins can also reveal the profitability of actors at different nodes along the value chain. The marketing margin refers to the difference between the prevailing prices at the two ends of the marketing hierarchy at the time when transactions take place (Ajala and

Adesehinwa, 2008). According to Ajala and Adesehinwa (2008), it assumes the following formula.

1) Marketing margin = Selling Price - Supply Price multiply by 100

Where selling price is the retail price and supply price is the producers' price. Thus, the size of the marketing margin reflects the structural efficiency of the marketing system.

2.3 Consumption, Demand and Supply of Rice in Nigeria

Rice has become one of a major source of calories for the average Nigerian. It is becoming difficult not to find rice on the daily menu of most Nigerians or the refreshment list of important ceremonies such as weddings and birthdays. In Nigerian markets, rice is a major grocery for those in the rural and urban areas, which often occupy a conspicuous position. It knows no religion, and does not discriminate against any tribe or believers in Nigeria. Both the Nigerian rich and poor eat it, though the contents of the preparation may be different. A combination of various factors seems to have triggered the structural increase in rice consumption over the years with consumption broadening across all socio-economic classes, including the poor. Rising demand is as a result of increasing population growth and income level (BERNAS, 2015). Milled rice consumption has increased significantly over the years from 240 metric tons in 1961 to 850 metric tonnes in 1981, and 2757 metric tonnes in 1991 to 4970 metric tonnes in 2011 (FAO, 2014). The incidence of demand-supply gap for rice in Nigeria has been an existing trend over the years and the trend would continue if appropriate measures are not taken despite the country huge potential for rice production (Oyinbo et al, 2015). Gyimah-Brempong et al. (2016) noted that the rice demand in Nigeria outplace domestic production due to rapid population growth, increasing incomes, urbanization and a decline in relative price of rice however, in spite of these revelations, debate persists on the effect of agricultural market openness on rice prices.

2.4 Transportation Cost

Nwele, James, Obasi. (2016), opined that 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 goods with motor vehicle, while some used two wheels truck or tricycle and some others used basins carried by women on their head as means of transport. High transportation cost and market power culminate to market inefficiency. This is especially true in the context of agricultural commodity marketing in developing countries, where traders have been found to have market power over farmers even after market liberalization in the 1980s and 1990s (Barrett, 1997; Fafchamps, 2004).

Empirically, a survey by Tesfaye et al. (2005) identified the challenges of the rice production, utilization and Marketing of rice at Fogera, Dera and Libokembe districts. The study pointed out both production and marketing constraints and more recommendations were forwarded. Oyatoye, (1994) in Nigeria found that if road quality improves, farmers have lower marketing costs and gain access to wider markets. They experience little or no delay in moving their produce and hence undergo fewer losses. They also receive better market prices for their products as the realization of a new road always attracts more of transportation systems and eases access to farm. Ibezim (1985), estimate the marketing margin of rice by various participants in the marketing process in Uzo-Uwani and Nsukka local government area. The estimates which were presented in Table 13 of their study, indicated that for every ton of rice sold, farmers received a price of ₦791- corresponding with about half of the retail price paid by consumers. The difference between the farmer and consumer price is explained by the marketing costs and marketing returns for the various market agents or middlemen. Estimated marketing costs amount to 3.4% of the consumer price, whereas estimated marketing returns amounted to 47% (₦755). Wholesalers and retailers achieved the highest marketing returns of approximately 20% of the consumer price each. Ashimogo et al. (2003) identified the factors affecting marketing as low or fluctuating producer prices, lack of credit facilities, unreliable market outlets, and high price of modern inputs. The most important household factors were lack of capital to buy inputs and for land preparation, chronic illness in the family, expensive hired labour and lack of knowledge about yield improving farming techniques. The Analytical frameworks adopted for the study were descriptive, Gross Margin and Multiple Regression Analysis. The models employed are the gross margin.

Gross Margin is an indicator of whether a company is running an efficient operation and if its sales are good enough. It can also be kwon as Gross Profit Margin. Gross margin is the difference between the gross farm income (GFI) and Total Variable Cost (TVC). It is a useful planning tool in situations where fixed capital is a

negligible portion of farming enterprises as in the case of small scale subsistence agriculture (Olukosi and Erhabor, 1988). The equation is expressed as. TR – TVC = GM,

Where TI = Total Revenue, TVC = Total Variable Costs and GM = Gross Margin,

Net Profit (GM – TFC),

Where GM = Gross Margin, TFC = Total Fixed Costs.

Multiple regression analysis refers to econometric tool which describes in mathematical form the relationship between variables. It helps to determine the extent to which changes in a given variables (independent variables) affect other variable (dependent variable); that is, it deals with cause-effect relationship (Maddala, 1992). The independent variables are used to induce change or explain the behavior of dependent variable. They are exogenous factors that influence, here in marketing constraints influence on gross margin of local Rice Retailers. The multiple regression model can be expressed implicitly or explicitly. The implicit form is expressed as

$$Y = f(X_1, X_2, X_3, X_4 \ldots X_n) + U) \quad (1)$$

Explicitly, it expressed as:

$$Y = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a4X4 \ldots a_nX_n + U \quad (2)$$

Where

Y = Dependent variable

f = Functional relationship which is how X^s are transformed to Y

$X_1 – X_n$ = Independent variables

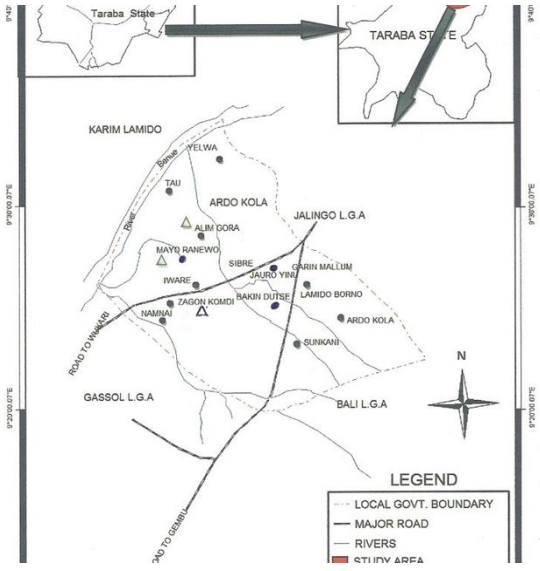
$a_0 – a_n$ = Parameter estimates (coefficient) that is, the basic descriptive measures of population or the expected value

U = Error term.

3. Methodology

This study was carried out in Ardo-kola Local Government Area of Taraba State. It is one of the local governments Area of the state. Its headquarters are in the town of Sunkani. It has an area of 2,262km^2 and a population of 86,921 at the 2006 census. The local government area lies between latitude 80 30" and 900 10" of the equator and longitude 100 58" and 110 30" of the Greenwich meridian. The postal code of the area is 660. The local government is predominately agrarian in nature and rich alluvial track of soil found in most part of the local government area are conducive for growing of various food crops, majority of inhabitants of the local government area are engage in farming and rearing of animals as an occupation. The local government area is made up of Twelve(12) towns, which are. Iware, Jauro-Yinu, Jiru, Lamido-Borno, Mallum, Mayo-Ranewo, Sarkin-Dutse, Sibre, Sunkani, Tau, Zongo-Kombi, Ardo-Kola.

Figure 1. Map showing Ardo-Kola Local Government Area Taraba State



3.2 Sampling Procedure

For the purpose of this study, purposive and multistage random sampling methods were used in the selection of the respondents. Five major markets located at Iware, Jauro-Yinu, Mallum, Tau and Mayo-Ranewo, was selected purposively for sampling. sixty (60) rice retailers were randomly selected using simple random sampling technique. Data was collected through primary sources and was conducted with the aid of structured questionnaire which was administered to local rice retailers in the five selected major markets. A total of 60 questionnaires were administered to the five major markets thus: Tau (12), Jauro-Yinu (12), Iware (12), Mallum (12) and Mayo-Ranewo (12) each.

3.3 Data Collection

Primary data used which were collected from individual marketers include age, gender, marital status and household size, major occupation of respondent, educational level, marketing experience, and source of capital. Other information include major constraints to rice retailers include. Transportation cost, cost of salers'-mudu, cost of handling, packing cost, union fee and cost of shop rent. Structural questionnaire was administered to the respondents in the study area to collect the data.

3.4 Data Analysis

In an attempt to achieve the stated objectives of the research, Objectives (i), (iii), were analyzed using descriptive statistics such as percentages and frequency distribution. Objective (ii), was analyzed using Gross margin. While objective (iv), was analyzed using of Regression analytical techniques

3.5 Model Specification

The models fitted include the Gross margin, Net Profit and Multiple Regression as specified in the following equations and applied during analyses:-

Gross margin: TR – TVC = GM.

Where,

TR = Total Revenue,

TVC = Total Variable Costs and

GM = Gross Margin, and by extension, Net Profit is express as GM – TFC. Where GM = Gross Margin, TFC = Total Fixed Costs.

Ordinary least square(OLS) regression model. This regression analysis was use to determine the effects of marketing constraints on Gross margin of local rice retailers. The explicit form of the linear equation is given as;

$Y= b1x_1+ b_2X_2+ b_3X_3+ b_4X_4+ b_5X_5$……..……..(1)

The implicit form of the equation is given by:

$Y=f(X_1+X_2+X_3+X_4+X_5+X_6+U)$…….……(2)

Where,

Y= Gross margin of local rice retailers

X_1=Transportation cost (N)

X_2= Union fees (N)

X_3= Handling cost (N)

X_4= Cost of Saler-Mudu (N)

X_5= Shop rent (N)

X_6= Packing cost (N)

U=Error term

4. Results and Discussion

4.1 Socio-Economic Characteristics of the Respondents

Socio-economic characteristics of the rice traders were discussed under the following headings; sex, marital status, age, level of education, household size, years marketing experience, source of income.

Table 1: Frequency Distribution of Retailers according to their Sex

Sex	Frequency	Percentage
Male	18	30
Female	42	70
Total	60	100

Source: Field survey, 2020

As can be observed from Table 1above, the majority of the rice retailers were female, constituting 70% of the respondents, while 30% of the respondents were males. This finding agrees with Anthony, Chukwuma Nwali and Anyalor, Maureen (2019) who finds out that majority of local rice retailers are females. Also, the report of CTA (2007) that women undertake almost ninety percent of agricultural marketing.

Table 2: Frequency Distribution of Retailers according to their Marital Status

Marital Status	Frequency	Percentage
Single	9	15.0
Married	33	55.0
Widow	7	11.7
Devoiced	10	16.7
Widower	1	1.7
Total	60	100

Source: Field survey, 2020

The results in table 2 above shows that 15% of the respondents were single, 55% of the respondents are married, 16.7% of the respondents are divorced, and 11.7% and 1.7% of the respondents were widow and widower respectively. This result agrees with Anthony Chukwuma Nwali and Anyalor Maureen (2019) who finds out that majority of local rice retailers are married.

Table 3: Frequency Distribution of Retailers according to their Educational level

Education Level	Frequency	Percentage
Primary	31	51.7
Secondary	16	26.7
Tertiary	3	5.0
Non-formal	10	16.7
Total	60	100

Source: Field survey, 2020

From table 3 above it is clear the educational qualification of the respondents were of (4) different educational levels, with non-formal constituting the least, 16.7% as against formal educational qualification constituting 51.7% in primary educational level. 26.7% were having secondary school certificate, while only 5.0% attained tertiary educational level. It is worthy of note that the highest number of the respondents having primary

education qualification agrees with findings of Ifejirika (2011). That most of rice retailers have primary education.

Table 4: Frequency Distribution of Retailers according to their Source of Income

Source of Income	Frequency	percentage
Savings	35	58.3
Informal- lenders	15	25.0
Cooperatives	10	16.7
Total	60	100

Source: Field survey, 2020

Table 4 shows the source of capital of the respondents. Above 58.3% of the respondents had personal savings as their source of capital, 25.0% had informal lenders as their source of capital and 16.7% had cooperatives society as their source of capital generation. This findings agrees with Anthony Chukwuma Nwali and Anyalor Maureen (2019) who finds out that majority of local rice retailers generate their capital from personal savings.

Table 5: Distribution of Retailers according to their Age range

Age range	Frequency	percentage
25	7	11.7
26-35	25	41.7
36-45	16	26.7
46-55	12	20.0
Total	60	100

Source: Field survey, 2020

Table 5 shows that the respondents between the age of 25 constitute the least (11.7%) of the total respondents, the age group of 26-35 constituting the majority (41.7%) of the respondents. This indicates that the retail market is dominated by those within productive, active struggling age brackets. This finding is in line with result of Emokaro and Egbodion (2014).

Table 6: Distribution of rice retailers according to household size

Household Size	Frequency	Percentage
1-5	24	40.0
6-10	33	55.0
11-15	2	3.3
16	1	1.7
Total	60	100.0

Source: Field survey, 2020

The results on the retailers' household size are presented on table 6. From the results obtained, it can be seen that majority of the respondent household sizes were between group 6-10, constituting (55.0%) of the respondents' household size. This is in line with the findings of Okeke, and Nwoye, (2019).

Table 7. Distribution of Retailers according to Years of Marketing Experience

Years of marketing	Frequency	Percentage
1-5	22	36.7
6-10	19	31.7
11-15	7	11.7
16-20	3	5.0
21-25	9	15.0
Total	60	100

Source: Field survey, 2020

Table 7 shows that 36.7% of the respondents have 1-5 years marketing experience, 31.7% have 6-10 years of experience and 15.0%, 11.7%, 5.0% have 21-25 years, 11-15 years and 16-20 years respectively. It shows that majority of rice retailers in the study area are within the age brackets of 1-5 years followed closely by 6-10 years marketing experience. It is in line with the findings of Ifejirika (2011), that years of experience of Rice marketers are between 6-10 years.

4.2 Marketing Constraints faced by the Respondents

Marketing constraints of the rice traders were discussed under the following headings; Transport cost, Union fees, Cost of handling, Cost of salers'-mudu, shop rent, packing cost.

Distribution of respondent according to constraints faced in course of marketing.

Table 8: Distribution of Respondent according to Constraints Faced

Constraints faced	number of respondents (=60)	
	Yes	No
Transport	52	8
	(86.7%)	(13.3%)
Union fees	22	38
	(36.7%)	(63.3%)
Cost of handling	35	25
	(58.3%)	(41.7%)
Cost of salers'- mudu	35	25
	(58.3%)	(41.7%)
Shop rent	48	12
	(80.0%)	(20.0%)
Packing cost	44	16
	(73.3%)	(26.7%)

Source: Field survey, 2020

Results of constraints faced respondents in course of local rice retailing business are as follows. Cost of transport 86.7%, Union fees 36.7%, cost of Handling 58.3%, cost of salers'-mudu 58.3%, shop rent 80.0% and cost of packing at 73.3%. The result shows that the major constraints faced my rice retailers in the study area, is cost of transport. This is in agreement with that of Ahmed A. et, al. (2018). That cost of transport is a major problem faced in the transport and marketing of agricultural product.

Table 9: Effects of Marketing Constraints on Rice Retailers Gross Margin

Model	Unstandardized Coefficients		Standardized Coeff.	t	sig.
	B	Std. Error	Beta		
Transport cost	1.901	0.851	0.229	2.234	0.030
Union fee	-8.083	3.552	-0.184	-2.276	0.027
Cost of handling	10.484	8.774	0.441	1.195	0.237
Cost of salers'-mudu	29.7	80.682	-0.021	-0.369	0.714
Shop rent	-3.252	6.218	-0.067	-0.523	0.603
Packing cost	11.907	7.382	0.512	1.613	0.113

Source: Field survey, 2020

X_1= Transport Cost: The coefficient is 1.901 which is significant at 3% level of significance; showing a direct relationship with retailers gross margin. This implies that a unit decrease in retailers transport cost will increase the retailers margin by 1.901 unit. It is evident that the retailers pay commensurate transport costs that does not affect margin negatively, hence the more goods transported and sold, the more the margin made from sales. Additional information provided confirmed that total cost of goods includes overall production, transportation, distribution, warehousing and marketing costs (Hamlett, 2018), implying that determining a product markup involves a company use of the product‟ selling price and total cost, while in determining gross margin/profit, a company takes its total revenue and subtracts cost of goods sold.

X_2= Union fee: The coefficient is -8.083 which is significant at 1% level of significance showing an inverse relationship with retailers gross margin. This implies that a unit decrease in union fees will increase the retailers margin by 8.083 units all things being equal. It is in agreement with Rose Omari et, al. (2018), which states that implementation of certain specific interventions tax reduction by the government could help salvage marketing challenges.

X_3= Cost of Handling: The coefficient is 10.484 and X4= Cost of Salers'-mudu The coefficient is -29.742. These are not significant at any lower level of significance, showing less stressed relationship with retailers' gross margin.

X_5= Shop Rent The coefficient is -3.252 which is significant at 10% level of significance, showing an inverse relationship with retailers gross margin. This implies that a unit decrease in shop rent will increase the retailer margin by -3.252 units all things being equal.

4.3 Model Summary

The model summary below shows that R^2 = 92%, while the adjusted R^2 = 91%, yielding an approximate average of R^2 = 91.5%

Table 10: Model Summary

Model	R	R Square[b]	Adjusted R Square	Std. Error of the Estimate
1	0.957[a]	0.916	0.907	52584.70034

a Predictors: Cost due to union fees, transport cost, cost of handling, cost of salers'-mudu, packing cost.

This implies that 91.5% of the variations in the marketing margins of the rice retailers in the study area were explained by the independent variables. Hence, there are likely other variables that may influence the margins, but are not captured in the model.

5. Conclusion

This study assessed the effects of marketing constraints on the gross margin of local rice retailers in Ardo-kola LGA of Taraba State, Nigeria. The F- Cal is seen to be significant at 1% level of significance. More so, the F-Cal 98.66 ≥ F-tab 2.19; Conclusively, the results show that some of the explanatory variables such as transportation

cost, union fees and shop rent were significant; hence marketing constraints have effects on the marketing margins of local rice retailers in Ardo-kola LGA of Taraba State.

5.1 Recommendations

Based on the major findings of this study, it is recommended that:-

1. Since decrease in transport cost increases marketing margin of the retailers, the local as well as the Local and the Federal government should provide infrastructure such as good roads to smoothen the transportation of rice to the area markets by the retailers and as such help in reduce the costs of transportation.

2. Since decrease in union fee absolutely increases marketing margin of the retailers, governments should make efforts to decrease tax and increase marketing capital, by giving out loan at low interest rate, to increase the margin of the marketers in the long run.

3. Given that decrease in shop rent will absolutely affect marketing margin of the retailers, the local governments and stakeholders should not only reduce tax, but provide cheaper facilities for marketing outlet to improve the margin of the marketers.

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