Article

Roles of Retail Cooperative Marketing Strategies in Improving Marketing Efficiency of Small Agri-businesses in Ogun State, Nigeria

Ayodeji Kehinde [1,*]

[1] Department of Agricultural Economics, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria.

* Correspondence: kehindeayodeji8@gmail.com

Abstract: Marketing strategies are essential tools that improve the marketing efficiency of small agri- businesses. This paper examined the effects of marketing strategies on the marketing efficiency of select small-scale farms in Ogun State, Nigeria. Garri's Poultry Processing and Feeding Industries were the firms selected for this study. A two-step sampling procedure was used to select 100 respondents consisting of 50 respondents each in the Garri and poultry feed processing industries respectively. Data were analyzed using descriptive statistics, the marketing margin and efficiency model, and the ordinary least squares (OLS) model. The results revealed that product (40%) and pricing (26%) strategies were the most important marketing strategies used by the poultry feed industries, while pricing (28%) and location strategies (27%) were the most important marketing strategies employed by Garri's crafting Industries. The marketing margin and efficiency model revealed an average net marketing margin of ₦ 16.502 with an efficiency of 0.34 for the poultry feed industries. On the other hand, the average net marketing margin of Garri's processing industries was ₦ 119 278.91 with an efficiency of 3.4. Regression estimates revealed that market research and pricing strategies positively impacted the marketing efficiency of the poultry feed industries, while pricing, product and location strategies positively impacted the marketing efficiency of the poultry industries. The findings implied that price is a strong predictor of marketing efficiency for small-scale farms. It is necessary to apply the use of pricing strategies for the marketing of agro-industrial products, as it plays an important role in increasing the efficiency of the marketing system of feed processors and Garri.

Keywords: marketing; strategies; small-scale; agro-industries; marketing efficiency analyses.

1. Introduction

Agri-businesses are industries that engage in activities associated with the creation of added value to agricultural products for intermediate or final consumption, generally food [1]. The most important agri-food industries in Nigeria, particularly in Ogun State, are the Garri Processing and Poultry Food Processing Industries, which account for over 50% of the agricultural processing sector [2]. These agro-industries play an important role in creating employment and income opportunities in the rural areas of Ogun State. These agro-industries have a large potential to stimulate wealth

creation and economic emancipation of the rural population. However, the agri-food industries in Nigeria are performing below expectations in terms of wealth creation and economic development of the country [3]. The role of small-scale agro-industries in economic empowerment depends on the strength of their marketing efficiency. According to [4], marketing would be efficient, if the marketing costs are sufficient to cover the added value through the creation of public services. Marketing efficiency is a primary factor influencing the growth of agri-food companies. This could be attributed to the fact that marketing efficiency determines the overall economic performance of the sector and its long-term continuity. Therefore, understanding the marketing efficiency of firms becomes crucial for establishing the solvency and stability of firms.

However, most of the firms in Nigeria have been inefficient in the market due to a number of challenges [5]. These challenges can arise from ineffective marketing strategies implemented by agri-food companies. Marketing strategy is a method used by companies to meet the needs or satisfaction of customers at affordable prices [6]. Marketing strategy is a necessary requirement for industries to strengthen their market share and financial capacity [6; 7; 8; 9; 10; 11]. Therefore, marketing strategies determine the company's ability to thrive well in a challenging competitive environment. Marketing strategies involve the management of market research with marketing 4Ps or the price, the product, the place and the promotion to attract and satisfy customers [12]. However, ineffective marketing strategies have been found to be the core marketing problem of these small-scale firms in Nigeria [5; 3].

[13] added that the lack of understanding and application of the basic ingredients of marketing, research, segmentation, planning and control has led to ineffective marketing strategies. With these problems such as bad products, poor knowledge of competition, bad promotion, bad distribution, bad pricing methods, small-scale agri-food industries are in a disadvantageous position to deal with large companies in a competitive environment [7]. Due to the aforementioned dysfunctional marketing behavior, these small-scale agri-food companies have difficulty adopting retail cooperative market strategies to improve their marketing efficiency (14; 9; 15). According to [16]and [11], information on marketing strategies can help make decisions about a range of strategies to overcome these marketing challenges. However, this information appears to be inadequate in Nigeria, due to the fact that there has been no record highlighting the set of marketing strategies in use and their effect on marketing efficiency. In light of the above and the need to offer relevant solutions to marketing problems regarding marketing strategies for small agricultural businesses in the study area, the following questions are relevant; What are the marketing strategies employed by small agri- businesses? What are the marketing margins and marketing efficiency of small agri-businesses? What effects do marketing strategies have on the marketing efficiency of small agri-businesses?

Marketing efficiency implies a measure of the performance of companies in the market. It reflects the costs and profits of the company. Marketing strategies are important tools that could improve the marketing efficiency of the company. However, the use of marketing strategies requires skills on the part of the company. Although small agricultural businesses use the use of marketing strategies without being aware of them, the combination of marketing strategies employed by these industries contributes to their performance. The literature proposes five types of marketing strategies, namely: (1) Price strategy: Price is defined as the value of a good or service expressed in monetary terms. Because of its impact on corporate profits, pricing is an important strategy in the marketing mix. The pricing strategy is also known as the penetrating pricing strategy. The pricing

strategy has a positive impact on the company's marketing performance [7]. (2) Product strategy: The product is anything that is offered for sale in a market to satisfy the wishes or needs of consumers. The product strategy includes product differentiation strategies such as the physical appearance of the product, packaging and labeling information [17]. The product strategy has a positive impact on the marketing performance of the company [7] (3) Promotion strategy: are the marketing strategies that involve persuasion or encouragement of consumers to buy or try a product. It includes traditional advertising, personal selling, sales promotion, public relations, direct marketing, among [18]. Promotion is one of the critical strategies in the marketing mix and ensures that product information reaches the consumer. The promotion strategy has a positive impact on the company's marketing performance [7]. (4) Place strategy: Also known as distribution strategy. It consists in bringing the products of the companies to the desired market [19]. These are decisions to make companies' products available to consumers. Locational strategy requires effective distribution of products through marketing channels [7]. The locational strategy has a positive impact on the marketing performance of the company. (5) Market research strategy: involves continuous interaction between the company and consumers in order to incorporate consumer feedback into the product to satisfy consumer wishes and minimize potential problems related to the use of the product. This strategy facilitates the use of the products [20]. The market research strategy has a positive impact on the company's marketing performance [21]. Marketing strategies have the potential to build strong and lasting relationships with customers, leading to greater marketing efficiency.

2. Materials and Methods

Description of the study area. This study was conducted in the state of Ogun, Nigeria. The state of Ogun borders the Republic of Benin to the west, the state of Lagos and the Atlantic Ocean to the south, the state of Ondo to the east and the state of Oyo to the north. Ogun state covers an area of 16,762 km^2 with a population of 3,728,098. This state is also perhaps the most industrialized state in Nigeria, with a very large population of agribusiness companies in the state. The state has 20 local government areas and is located approximately between latitude 3o 30'N and 4o 30'N and longitude 6o 30'E and 7o30'E [22]. Of the twenty LGAs, the five LGAs selected for this study are Aso Odo / Ota, Ifo, Shagamu, Ewekoro and Obafemi-owodo LGA due to the density of agri-food activities in the LGAs.
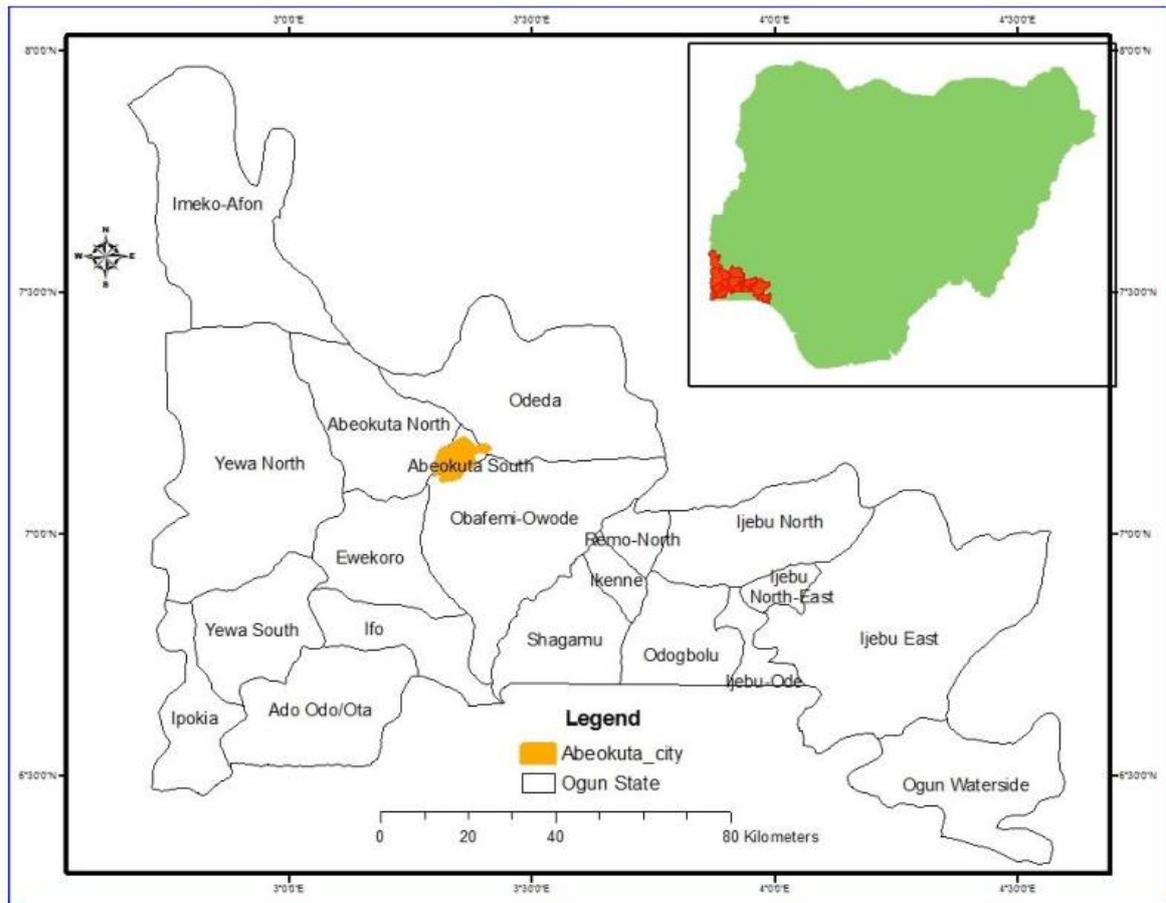
Figure 1. Map of Ogun state.

Sampling procedure. Two categories of agro-industries were selected for the study, namely, poultry feeds and Garri processing industries. The selection was based on the fact that these two agro-industries are the most important agro-industries in the Ogun State. A two-step sampling procedure was used to select a total number of 100 respondents for the study consisting of 50 respondents each in the poultry feeds and Garri processing industries. In the first phase, five Local Government Areas (LGAs) were intentionally selected based on the dominance of Garri's feed and poultry processing industries in the state. In the second phase, ten poultry feed trading industries and ten Garri processors were randomly selected from each of the chosen LGAs. Finally, qualified representatives of these selected agro-industries were interviewed to obtain relevant information.

Method of data analysis. Descriptive statistics, marketing margin and marketing efficiency analyses, and Ordinary Least Square (OLS) regression models were used to analyze the collected data.

Descriptive statistics (such as frequency and percentage) were used to identify the marketing strategies employed by the selected small scale agro-industries.

Marketing margin analysis was used to determine the marketing margin of small-scale Agro-industries. Following [11;23], the marketing margin for small-scale Agro-industries is expressed as;

$$MM = \frac{selling\ price - purchasing\ price}{selling\ price} \qquad \dots \qquad (1)$$

Where: MM = Marketing margin; SP= Selling price: PP= Purchase Price

Marketing efficiency is the measure of the market performance. Following [16; 24] Marketing efficiency of small-scale Agro-industries is expressed as;

$$Marketing\ Efficiency = \frac{Net\ margin}{marketing\ cost} \qquad \dots \qquad (2)$$

The net margin is the difference between the marketing margin and the marketing cost.

Marketing strategies are directly related to exogenous variables that describe the social and economic environments in which companies make decisions. Following [24; 25; 16], the OLS regression model was adopted to determine the effects of marketing strategies (Price, Product, Location, Promotion, Market Research Strategies) on the marketing efficiency of small agro-industries. OLS was adopted because it models the exogenous relationship between marketing efficiency and marketing strategies.

The model is explicitly expressed as;

$$Y_i = \beta_0 + \beta_1 X_I + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + U_i \qquad \dots \qquad (3)$$

where:

Y = Marketing efficiency of small-scale agro-industries;

The explanatory variables are defined as follows:

X_1= product strategy (1= adopt product differentiation; 0=otherwise); X_2= Price strategy (1= adopt penetration pricing; 0= otherwise); X_3= promotion strategy (1= adopt traditional advertising, personal selling, sales promotion, public relations, social media, and e-commerce used to promote a product; 0 = otherwise); X_4= place strategy (1 = adopt distribution of the product; 0= selling at a particular place); X_5= Marketing research strategy (1= adopt incorporating customers feed backs into the product; 0= otherwise); Ui = The error term which capture all other strategies that can affect efficiency of small-scale industries but not taken into account in this study. The assumption is that the error term U_i is normally distributed with mean zero and the variance one.

Table 1. Aprior expectation.

Variables	Units	Expected signs
Price Strategy	1= adopt penetration pricing; 0= otherwise	+
Place Strategy	1 = adopt distribution of the product; 0= selling at a particular place	+
Promotion Strategy	1= adopt traditional advertising, personal selling, sales promotion, public relations, social media, and e-commerce used to promote a product; 0 = otherwise	+
Product Strategy	1= adopt product differentiation; 0=otherwise	+
Market research Strategy	1= adopt incorporating customers into the product; 0= otherwise	+

3. Results and Discussion

The marketing strategies employed by the Garri and poultry feed processing industries are presented in Table 2. The two selected industries in Ogun State used the five marketing strategies

studied at different levels. In the poultry feed industries, the majority (40%) used the product strategy. This implies that the product strategy consists of the marketing strategies used predominantly among poultry feed companies. This could be due to elements of the product strategy, such as quality and aesthetic characteristics, including packaging, branding, warranties, etc., which are vital in attracting and retaining buyers of poultry feed. On the other hand, the pricing strategy (28.4%) turned out to be the marketing strategy used predominantly in Garri's processing industries. This could be attributed to the fact that the Garri price discount remains the only marketing strategy capable of attracting and supporting Garri shoppers.

Table 2. Marketing strategies employed by selected agro-industries.

	Poultry feeds marketing industries		Garri processing Industries	
Marketing Strategies	**Freq.**	**Percentage**	**Freq.**	**Percentage**
Product strategy	46	39.7	36	21.3
Price Strategy	31	26.7	48	28.4
Place strategy	9	7.75	46	27.2
Promotion strategy	21	18.1	13	7.7
Marketing research	9	7.75	26	15.4

*Multiple responses

Marketing margin and marketing efficiency of selected small scale agro-industries are presented in Table 3. Poultry feeds firms incur an average total marketing cost of ₦ 48,248 per month and realized an average net marketing margin of ₦16, 502 per month. This implies low marketing margin in the poultry feed industries.

Table 3. Marketing margin and efficiency of selected small scale agro-industries.

Industries	Qty sold (bags)	Mean PP per bag (₦)	Mean SP per bag (₦)	Mean GM (₦)	Mean MC (₦)	Mean MM (₦)	Efficiency
Poultry feeds	368.6	3201.51	3385.31	64,750	48248	16502	0.342
Garri Processing	441	2400	2750	154,350	35,071.09	119,278.91	3.40

SP = Selling price; PP = Purchasing price; MM = Marketing margin; MC = Marketing cost; GM = Gross margin.

This could be as a result of poor implementation of marketing strategies. Marketing efficiency of poultry feed marketing industries showed a marketing efficiency of 0.34. Since the marketing efficiency obtained is less than 1, it can rightly be concluded that the marketing system of poultry feeds industries is less efficient. This could further reveal poor implementation of marketing strategies in Ogun State. On the other hand, Garri processing industries incurs an average marketing cost of ₦35, 071 per month, average net marketing margin of ₦ 119,278.91 per month was realized. However, the efficiency of Garri processing industries was found to be 3.4. This reveals an efficient

marketing system in Garri processing industries. Although, the sampled small scale agro-industries were operating profitably, Garri processors had higher marketing margin and marketing efficiencies as compared to poultry feed firms. The low marketing efficiency in the poultry feed industries could be attributed to concentration on product strategy and low implementation of other strategies.

The effects of marketing strategies on the marketing efficiency of the poultry feed industries are presented in Table 4. The model fits reasonably into the data. The F-value was 20.15 and the adjusted R-square was 0.68. The F-value was significant (P = 0.000), suggesting strong explanatory power. This shows that the whole model fits better and is significant at 1%. The adjusted R-squared suggests that 68% of the variability in the marketing efficiency of the poultry feed industries is jointly explained by its association with the independent variables specified in the model. Table 3 revealed that prices and market research strategies are important factors affecting the market efficiency of the poultry feed industries. The pricing strategy coefficient was significant and positive. This implies that a further increase in the use of the pricing strategy will lead to an increase in the marketing efficiency of the poultry feed industries of ₦ 3.339. Likewise, the coefficient for the market research strategy was significant and positive. This implies that an increase in the market research strategy will increase the marketing efficiency of the poultry feed industries by ₦2.203.

Table 4. Effect of marketing strategies on efficiency of poultry feeds marketing industries.

Marketing efficiency	Coefficients	Standard error	T-value
Constant	4.505***	3.016	2.62
Product	0.557	2.749	0.20
Price	3.339**	1.596	2.09
Place	-1.720	2.503	-0.69
Promotion	-0.237	1.531	-0.15
Market research	2.204*	2.398	1.94
R Square	0.73		
Adjusted R- square	0.68		
F- Value	20.153***		
N	50		

*, **, ***, the estimate is significant at 10, 5 and 1%, respectively.

The effects of marketing strategies in Garri's processing industries are presented in Table 5. The F-value was 29.56 and the adjusted R-squared was 0.55. The F-value was significant (P = 0.000), suggesting strong explanatory power. This shows that the whole model fits better and is significant at 1%. The adjusted R-squared suggests that 55% of the variability in the commercial efficiency of the poultry feed industries is jointly explained by its association with the independent variables specified in the model. Table 3 revealed that product, location and pricing strategies are important factors affecting the business efficiency of Garri's processing industries. The product strategy coefficient was significant and positive. This suggests that an increase in product strategy will lead to an increase in the marketing efficiency of Garri's processing industries of 1,478. The feedback for this result was in line with [10]. Likewise, the place strategy coefficient was significant and positive. This implies that an increase in the use of locational strategy will increase the marketing efficiency of Garri's processing industries by ₦ 2.072. This was in line with [8]. The pricing strategy coefficient was significant and positive. This means that an increase in the use of the pricing strategy unit will increase the marketing efficiency of the Garri processors by ₦2.893.

Table 5. Effect of marketing strategies on efficiency of Garri processing industries.

Marketing efficiency	Coefficients	Standard error	t-value
Constant	5.570**	5.226	1.96
Product	1.478 **	0.663	2.02
Price	2.893 ***	1.013	3.57
Place	2.072 **	1.524	1.96
Promotion	-0.237	-1.531	- 0.96
R Square	0.632		
Adjusted R Square	0.549		
F value	29.56 ***		
N	50		

, *, the estimate is significant at 5 and 1%, respectively

4. Conclusions

This paper investigated the effects of marketing strategies on selected small-scale agro-industries in Ogun State. Data were collected from 50 respondents each from poultry feed and Garri processing firms making total number of 100 respondents for the study using multistage sampling procedure. The result showed that product and price strategies were identified to be predominantly employed by the poultry feeds industries while price and place strategies were predominantly employed by Garri processing industries. This could be as a result of elements in these strategies which are vital in holding and keeping customers and improving sales in the respective selected agro-industries. Furthermore, the study revealed relatively low marketing margin and marketing efficiency in the poultry feed industries as compared to Garri processing industries. Market research and pricing strategies are important factors affecting the marketing efficiency of the poultry feed industries, while the marketing efficiency of Garri's processing industries is influenced by pricing strategies, location and product. This study concluded that pricing strategy is a strong predictor of the efficiency of the small-scale agri-food industries under study. Based on the results of this study, it was recommended that both industries employ effective use of pricing strategy for the marketing mix. Furthermore, poultry feed companies should not underestimate the importance of market research strategy as it has the ability to increase marketing efficiency in poultry feed industries while the Garri processing industries have to employ product strategies and localization, as they have the ability to increase their market efficiency.

Conflict of Interest: The authors declare no conflict of interest.

References

1. Wilkinson, J.*;* Rocha, Agro-Industries, Trends, Patterns and Development Impacts. Global Agro industries Forum, New Delhi, 8-11 April, 2008.

2. Woldemichael, A.; Salami, A.; Mukasa, A.; Simpasa, A.; Shimeles, A. Transforming Africa's Agriculture through Agro-Industrialization. Africa Economic Brief, African Development Bank Group. 2017, 8(7), 1-12.

3. Oyebamiji, F. F.; Kareem, T.S.; Ayeni G. O. Impact of job satisfaction dimensions on job performance in a small and medium enterprise in Ibadan, South Western, Nigeria. Interdisciplinary Journal of Contemporary Research in Business. 2013, 4 (11), 509 – 521.

4. Obasi, I.O.; Amaechi, E.O. Efficiency of poultry marketing in Owerri Municipal Imo State. Research Journal of Agricultural and Environmental Management. 2013, 2(8), 197-201.

5. Adekanye T.O. The markets for food stuffs in Western Nigeria, Journal of African Studies. 2013, 3(1), 71-76.

6. Aremu M.A.; Lawal A.T. Exploring marketing strategy as a catalyst for performance in Nigerian telecommunication industry. IJMBS. 2012, 2(4), 65 – 71.

7. Owomoyela, S. K.; Oyeniyi, K. O.; Ola, O. S. Investigating the impact of marketing mix elements on consumer loyalty: An empirical study on Nigerian Breweries Plc. Interdisciplinary Journal of Contemporary Research in Business. 2013, 4(11), 485 –496.

8. Adewale, A. G.; Adesola M. A.; Oyewale I. Impact of Marketing Strategy on Business Performance A Study of Selected Small and Medium Enterprises in Oluyole Local Government, Ibadan, Nigeria. IOSR Journal of Business and Management. 2013. 11(4), 59-66. Available at: http://www.iosrjournals.org.

9. Dzisi, S.; Ofosu, D. Marketing Strategies and the Performance of SMEs in Ghana. European Journal of Business and Management. 2014, 6(5),102-111.

10. Ebitu, E. T. Marketing Strategies and The Performance of Small and Medium Enterprises in Akwa Ibom State, Nigeria.   British Journal of Marketing Studies, 2016, 4(5),51-62.

11. Isitor, S.U.; Otunaiya,   Iyanda, . Efficiency of Vegetable Marketing in Peri-Urban Areas of Ogun State, Nigeria Journal of Agricultural Science. 2016, 8 (3)**,** 109-120.

12. Sanzidur R.; Brodrick A. 2016. Exploring the potential of cassava in promoting agricultural growth in Nigeria, Journal Agriculture & Rural Development in the Tropics and Subtropics. 2016, 117 (1), 149–163.

13. Tom, D. I. Marketing Problems and the Performance of Selected Small and Medium Scale Enterprises in Calabar, Nigeria. A research project submitted to the Department of Marketing, University of Calabar, 2004, Calabar- Nigeria

14. Jha, S.N.; Agrawal, N.K. A Case Study of the Marketing Problems of Small-scale Industries. Management Convergence, 2010, 1(1): 67-74.

15. Isitor S.U.; Babalola D.A.; Abegunde T.E. Efficiency of Garri Marketing in Kwara State, Nigeria: Implication for Economic Empowerment. Journal of Tropical Agriculture, Food, Environment and Extension. 2019, 18(2), 1 – 7.

16. Taiwo, A.S. Strategic marketing strategies on the performance of firms in Nigerian oil and gas industry. Journal of Emerging Trends in Economics and Management Sciences. 2010, 1(1), 23-36.

17. Mohammad, A.H.; Wang, A.; Sunayya, B. Investigating the impact of Marketing mix Elements on Tourists satisfaction: An empirical study on East Lake. European journal of business and management. 2012, 4(7), 273-283

18. Brassington, F.; Pettitt, S. Principles of Marketing, 2nd Edit ion, Harlow: Pearson Education Limited. 200.

19. Abolaji, A. Marketing of Financial Services. Central Bank of Nigeria Press, Lagos, Nigeria. 2009.

20. Urbaniak, A. J. After the sale: What really happen to customer service. American Salesman. 2001, 46(2), 14-17.

21. Ruben, J. Managing after sales services: Strategies and inter firm relationships. PhD Thesis of Diph-KfmTechnic., Universitatstuttgat. 2012.

22. Ambali, O. I.   Production Efficiencies of Arable Crop Farmers in Ogun State: Comparative Analysis of Bank of Agriculture Loan Beneficiaries and Non-Beneficiaries. Journal of agricultural science and environment. 2012, 12(1), 104-119.

23. Offor, E.I.; Nse–Nelson, F.A.; Asokome, F. Determinants of Marketing Efficiency of Yam Market in Umuahia North Local Government Area of Abia State, Nigeria**.** Journal of Tropical Agriculture, Food, Environment and Extension. 2016, 15(2): 54 – 58.

24. Oke, M. O. Marketing Strategies and Bank Performance in Nigeria: A Post-Consolidation Analysis. Global Journal of Management and Business Research. 2012, 12(12):16-25.

25. Gbolagade, A.; Adesola, M. A.; Oyewale, I. O. Impact of Marketing Strategy on Business Performance A Study of Selected Small and Medium Enterprises (Smes) In Oluyole Local Government, Ibadan, Nigeria. IOSR Journal of Business and Management (IOSR-JBM). 2013, 11(4), 59-66.