

AGRICULTURAL MARKETING STRATEGIES AND SALES PERFORMANCE OF CROP FARMERS IN RIVERS STATE

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ABSTRACT

This study examined agricultural marketing strategies and sales performance of crop farmers in Rivers State. The study adopted the positivism research philosophy and the correlational research design. The population of this study consisted of crop farmers in Rivers State. The Cochran's formula was used to determine the sample size for the study. A sample size of 384 crop farmers was determined using the Cochran's formula. The sample size was drawn from the population randomly. A structured questionnaire was used to collect data from the respondents. The data collected were analyzed in tabular form while the hypotheses were tested using the Spearman Rank Order Correlation Coefficient (ρ). The SPSS version 24 was used to perform the bivariate analysis. The findings revealed that agricultural pricing strategy has significant relationship with sales volume of crop farmers in Rivers State. Agricultural pricing strategy was also found to have significant relationship with sales turnover rate of crop farmers in Rivers State. The study equally found a significant relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State. The study also revealed that agricultural distribution strategy is significantly related to sales turnover rate of crop farmers in Rivers State. From the findings, it was concluded that the agricultural marketing strategies (agricultural pricing strategy and agricultural distribution strategy) significantly enhance the sales performance of crop farmers in Rivers State. Therefore, it was recommended that crop farmers in Rivers State should adopt agricultural marketing strategies such as agricultural pricing strategy and agricultural distribution strategy as it would improve their sales performance.

Keywords: Agricultural marketing strategies, agricultural pricing strategy, agricultural distribution strategy, sales performance, sales volume, and sales turnover rate.

INTRODUCTION

In the agricultural sector where there are many farmers cultivating food crops in their locality, there is always a strong determination among crop farmers to improve their sales performance. Improving sales performance involves generating high volume of product sales and consistently increasing sales revenue of firms (Sara, 2017). When a farmer is able to generate high volume of sales and consistently grow its sales revenue, it will lead to business growth and survival (Ningsih et al, 2024). Crop farmers are desperate to increase their product sales and sales revenue so that their farm produces will not perish with them, leading to loss of revenue. Sharma and Sharma (2017) observed that farmers seek to convert their perishable crops into cash to avoid the situation of damage and loss of revenue. Converting farm produces into cash requires massive sales and higher sales turnover which have the potentials of increasing farmers' revenue and facilitating business growth (Sharma & Sharma, 2017). However, improving sales performance is not an easy task for crop farmers as it requires a lot of efforts and strategies. Therefore, crop farmers need to become more strategic in their marketing approach to improve their sales performance and this can be done through the implementation of agricultural marketing strategies.

Agricultural marketing is the production, packaging, pricing, promotion, and distribution of agricultural products to satisfy the needs of consumers (Ningsih et al, 2024). Chatterjee (2024) defined agricultural marketing as the production, coordination and movement of farm produces through various channels to places where they can satisfy consumer needs. This form of marketing

activities originated in the rural areas where agricultural products such as food crops, livestock and fishes are produced, processed, packaged and distributed to satisfy the needs of consumers in the urban areas. Agricultural marketing is a unique form of marketing due to the special characteristics of agricultural products which include seasonality, perishability, and bulkiness (Chibike & Nwuba, 2021). For example, agricultural products are seasonal in nature while the demand for them is stable throughout the year; hence, it is the function of marketing to ensure that these seasonal products are available to consumers throughout the year. Also, some agricultural products such as vegetables, fruits, tomatoes and pepper are highly perishable; therefore, it is the function of marketing to ensure that these perishable products get to the final consumers as quickly as possible. The adoption of agricultural marketing strategies can help to improve the sales performance of crop farmers in Nigeria. According to Jerome (2017), agricultural marketing strategies such as agricultural pricing, promotion and distribution strategies are vital tools for increasing the sales volume of agricultural firms. For example, the adoption of penetration and low pricing strategy can help farmers to boost the sales of their perishable products. Also, the adoption of intensive distribution strategy can help farmers to increase the sales volume of their seasonal products (Purnama et al, 2023). Deng (2024) opined that agricultural producers that adopt agricultural marketing strategies are likely to improve their sales performance and profit margin. According to them, agricultural producers would experience massive sales growth and higher sales turnover rate if they practice agricultural marketing strategies. It is against this backdrop that this study examines the relationship between agricultural marketing strategies and sales performance of crop farmers in Rivers State.

Statement of the Problem

Improving sales performance has been a challenging task to some crop farmers in Nigeria. Many crop farmers in Nigeria are experiencing poor sales performance due to the fierce competition in the agricultural sector. This is evidence by the decreasing sales volume of their products and the slow sales turnover rate of crop farmers in different parts of the country. It seems like many crop farmers do not properly priced their food crops and distribute their seasonal and perishable products in a strategic manner. It is disturbing to observe that some crop farmers overpriced their perishable products while others distribute their perishable products in a selective manner, resulting in poor sales performance. Given the sales challenges facing crop farmers in Nigeria, it becomes necessary for these farmers to adopt agricultural marketing strategies such as agricultural pricing and distribution strategies. There is a strong belief that agricultural marketing strategies can help crop farmers to improve their sales performance in the midst of competition. However, substantial empirical evidence that support this claim is lacking in literature, hence the need for this study.

Conceptual Framework

The conceptual framework of agricultural marketing strategies and sales performance is shown in figure 1 below:

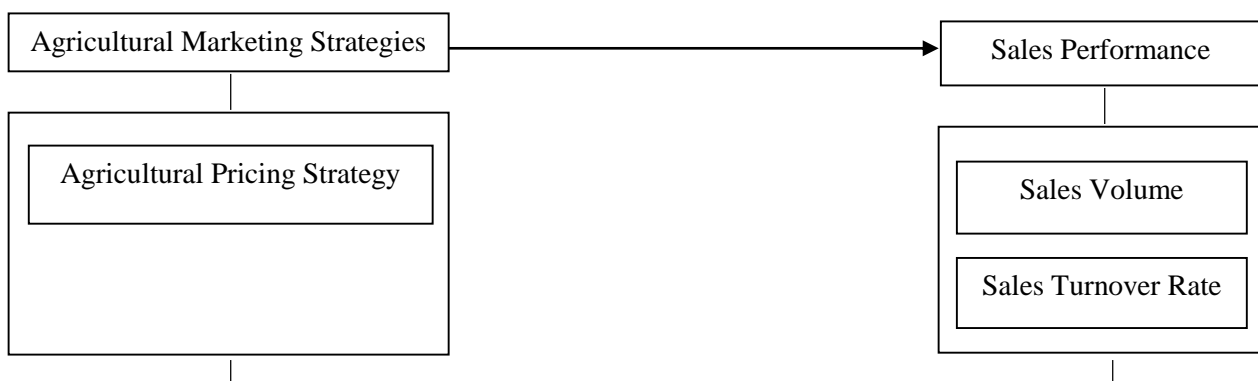


Fig 1: Conceptual framework of agricultural marketing strategies and sales performance of crop farmers

Source: Author's Conceptualization

Aim and Objectives of the Study

The study is aimed at exploring the relationship between agricultural marketing strategies and sales performance of crop farmers in Rivers State. The specific objectives of the study are to:

1. determine the relationship between agricultural pricing strategy and sales volume of crop farmers in Rivers State;
2. ascertain the relationship between agricultural pricing strategy and sales turnover rate of crop farmers in Rivers State;
3. examine the relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State;
4. determine the relationship between agricultural distribution strategy and sales turnover rate of crop farmers in Rivers State.

Research Questions

The following research questions were raised in this study:

1. What is the relationship between agricultural pricing strategy and sales volume of crop farmers in Rivers State?
2. To what extent does agricultural pricing strategy relate to sales turnover rate of crop farmers in Rivers State?
3. What is the relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State?
4. To what extent does agricultural distribution strategy relate to sales turnover rate of crop farmers in Rivers State?

Research Hypotheses

The following hypotheses were developed to guide this study:

- Ho₁: There is no significant relationship between agricultural pricing strategy and sales volume of crop farmers in Rivers State.
- Ho₂: There is no significant relationship between agricultural pricing strategy and sales turnover rate of crop farmers in Rivers State.
- Ho₃: There is no significant relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State.
- Ho₄: There is no significant relationship between agricultural distribution strategy and sales turnover rate of crop farmers in Rivers State.

Review of Related Literature

Concept of Agricultural Marketing

Agricultural marketing is the production, assembling, grading, packing, pricing, storage, transportation and distribution of agricultural products to satisfy the consumer needs (Sharma & Sharma, 2017). Similarly, Bawa (2015) defined agricultural marketing as a set of activities that involves the production, pricing, packaging, transportation and distribution of agricultural products such as food crops, livestock, fishes and forestry materials to satisfy needs. Marketing of agricultural products requires proper planning, organizing, directing and handling of agricultural products in order to satisfy the consumers (Jerome, 2017). This form of marketing begins with the idea of producing a saleable commodity and creating a marketing structure or system that will ensure that the products from the farm get to the final consumers at the right time. Okechukwu et al (2020) stated that agricultural marketing tends to satisfy the needs of consumers who demand for agricultural products such as food crops, livestock, fishes and forestry materials. Through the practice of agricultural marketing, farm produces move to places where they are needed (Zhao et al, 2021). Agricultural marketing has gained much importance in Nigeria due to the scarcity of food

items and the persistent hike in the prices of the available food products in the market. Consequently, the Federal Government has formulated and implemented policies and programmes to encourage agricultural marketing in the country.

Dimensions of Agricultural Marketing Strategies

There are several agricultural marketing strategies in literature; however, this study focuses on agricultural pricing strategy and agricultural distribution strategy.

Agricultural Pricing Strategy

Agricultural pricing strategy refers to the method adopted by agricultural marketers when fixing the prices for their products (Feurer et al, 2019). Pricing agricultural products is one of the most difficult marketing decisions to make considering the nature of agricultural products (Pippo, 2018). Hence, agricultural marketers need to fix the prices for their products strategically. Some agricultural marketers priced their products too low while others attached higher prices to their products (Chatterjee, 2024). When agricultural marketers priced their products too low, they generate more sales but leave substantial amount of their money on the table; while those that attached higher prices to their products tend to scare customers away, resulting to low sales (Friedman & Gerstein, 2014). Therefore, agricultural marketers must fix the prices for their farm produces strategically to generate more sales without compromising on profit. Marketers of agricultural products need to generate adequate information about the ruling prices of the different agricultural products in the market before setting the prices for their products (Deshpande, 2018). Strategically, agricultural marketers can attach lower prices for perishable products to attract quick sales and avoid the situation of product damage which brings substantial loss (Chibike & Nwuba, 2021). However, for seasonal products, agricultural marketers can attach slightly higher prices for seasonal products during the season where the crop yield is relatively low or scarcity of the products (Ningsih et al, 2024).

Agricultural Distribution Strategy

Agricultural distribution strategy is the method of moving products from the farm where they are produced to the places where they are needed for consumption (Choi et al, 2018). It involves the physical movement of agricultural products from the point of production to the point of consumption. Agricultural marketers need to make decision regarding how to distribute their farm produces to the marketplace. Strategically, agricultural marketer can decide to distribute its products intensively, selectively or exclusively (Zhao et al, 2021; Germain, 2017; Row, 2021). According to Germain (2017), intensive distribution involves selling the agricultural products to many retailers to ensure that the products are available in everywhere in the market. Selective distribution involves selling the agricultural products to few retailers who will then resell the products directly to consumers (Row, 2021); while exclusive distribution involves selling the products to only one or very few retailers who then distribute the products in selected geographical area (Zhao et al, 2021). However, agricultural marketers need to consider the nature of their products before deciding on the distribution strategy to adopt. Obviously, it is more appropriate to distribute perishable products using intensive distribution strategy instead of adopting selective or exclusive distribution strategy (Chatterjee, 2024). When the right distribution strategy is adopted for the right product, it will boost sales and vice versa (Row, 2021).

Concept of Sales Performance

Sales performance the result obtained by a company from engaging in its selling activities for a specific period of time (Bertuzzi, 2015). It indicates how well a company is doing in its selling operations in the marketplace. Schultz (2015) stated that sales performance is often used to describe how well or poorly an organization is doing against its competitors in the marketplace. However, a company can achieve a good sales performance if it has a good sales team (Sara, 2017). When the sales team meets its sales targets, the company would probably experience a good sales

performance for the period under review but when sales team fails to meet its sales targets, the company would experience a poor sales performance (Sara, 2017). Therefore, sales performance of a company depends on how well the individual sales representatives, sales managers and the entire organization are doing regarding their selling activities. Sales performance of a company is judged by the percentage to which the company grows its sales periodically (sales growth), the speed at which the company converts its inventories into cash (sales turnover rate) and the proportion to which the company grows its sales revenue from year to year (sales revenue growth) (Schultz, 2015).

Measures of Sales Performance

Sales performance is often measured using sales indicators such as sales volume, sales turnover rate, and sales revenue. In this study, sales performance is measured using sales volume and sales turnover rate.

Sales Volume

Sales volume refers to the unit or quantity of goods sold by a firm for a given period of time (Sam & Hoshino, 2013). A company can calculate its sales volume by multiplying the number of units sold by the time period (Rexhepi & Besnik, 2020). To determine sales volume growth rate, companies need to subtract their previous year sales volume from the sales volume of the current year and multiply the result by 100 before dividing the figure by the sales volume of the previous year (Kalash & Bilen, 2021). Kalash and Bilen (2021) stated that a sales volume growth rate of 5-10% is good for large companies while 10% sales volume growth rate is good for small and medium enterprises. A company needs to measure their sales volume periodically to determine growth rate or vice versa. Sales volume can be measured weekly, monthly, quarterly or yearly basis depending on the size of the firm (Odalo et al, 2016).

Sales Turnover Rate

Sales turnover rate is the speed at which a company converts its goods (inventories) into cash for a specific period of time (Schultz, 2015). The more sales a company makes, the higher the sales turnover rate of the company (Roberge, 2014). If a company has a higher sales turnover rate, it is an indication that the company is efficient in converting its goods into cash but where the goods stay in the warehouse for a longer time, it implies that the company is inefficient in converting its goods into cash (Odalo et al, 2016). Kalash and Bilen (2021) stated that higher sales turnover rate leads to higher profitability and business growth. Every company wants to quickly convert their goods into cash and speed up production operations. The longer time goods stay in the warehouse, the more difficult it is for the company to secure funds to execute other operations (Al-Hussaini, 2019). Therefore, it is important for companies to adopt strategies that will increase their sales turnover rate.

Theoretical Review

This study is anchored on the techno-ecology theory which was developed by Neo in 1988. This theory is based on the idea that technology and human ingenuity are the most important resources for the production and sustenance of food production (Scanlan, 2003). Techno-ecologists argued that food production can be increased through technology yields and human action while at the same time reducing the harm done to the environment. In line with the techno-ecology theory, fertilizers are produced by human beings to intensify agricultural produces. The techno-ecology theory is very relevant in explaining the importance of practicing agricultural marketing in Nigeria. The theory explains that the problem of food insecurity can be solved by encouraging more people to go into agricultural marketing (human action) and use modern farming technology like fertilizers to boost agricultural production. The theory explains that agricultural marketing strategies would not only help to ensure food security but would also improve the sales performance of crop farmers. Given the fact that the demand for agricultural products is increasing on a daily basis, the techno-

ecology theory urges more people to go into agricultural marketing using both human and technological resources to improve their sales performance.

Empirical Review

A number of studies have been conducted on agricultural marketing strategies of firms. For instance, Deng (2024) examined the formulation of agricultural product marketing strategies based on the analysis of customer value perception and demand. The study adopted the descriptive survey research design where a structured questionnaire was used to elicit data from 267 consumers in China. The data collected were analysed using percentage and frequency tables, graphs and bar chart while the hypotheses were tested using Pearson correlation. The findings revealed that product strategy, pricing strategy and promotional strategy of agricultural firms are formulated based on customer value perception and demand in China.

Jerome (2017) explored agricultural marketing strategies and challenges faced by the Ponmalai Santhai (local market) farmers in Tiruchirappalli, India. Their study adopted the survey research design where a structured questionnaire was used to collect data from 100 Santhai farmers who engaged in trading activities in Ponmalai Santhai. The data were collected from the respondents using a structured questionnaire while the percentage and frequency tables, mean, standard deviation, and Pearson correlation were used for data analysis. The findings revealed that agricultural marketing has significant impact on the livelihood of farmers as it helps farmers to produce and distribute their farm crops to customers and make profit from this activity. The study also revealed that perishability of agricultural products, unaffordability of vehicles, high cost of transporting agricultural products, highway toll charges, electricity charges, communication, marketing and financial problems are the major challenges facing farmers in Tiruchirappalli.

Ningsih et al (2024) examined the role of agricultural marketing strategies in improving the competitiveness of local products in the digital era. The study adopted the case study and qualitative research approach where in-depth interview was used to collect data from agricultural entrepreneurs in India. The data collected were analyzed using content and thematic analysis and the findings revealed that the use of digital technology such as social media and e-commerce and data-driven marketing practices plays a significant role in reaching out to a wider market and increasing sales. The study also revealed that the combination of storytelling, content personalization and direct consumer engagement are the most effective strategies used in reaching out to a wider market and boosting sales. The study concluded that the integration of digital technology into agricultural marketing strategies significantly strengthen the position of local agricultural products in the global market.

Chibike and Nwuba (2021) carried out a study to determine the relationship between agricultural marketing and performance of agricultural firms in Anambra State, Nigeria. Their study adopted the survey research design where questionnaire and personal interview were used to collect data from 30 agricultural firms in Anambra State. The data collected were analyzed statistically using percentage and frequency tables while the hypotheses were tested using Pearson correlation coefficient. The findings revealed that interactional marketing and network marketing have significant influence on sales volume of agricultural firms. The study concluded that transactional, database, network and interaction marketing significantly influence the performance of agricultural firms in Anambra State.

Victor-Anucha (2021) examined the relationship between agricultural produce marketing and food security in Nigeria. The study adopted the positivism research philosophy and the correlational research design where data were collected from 211 commodity dealers in South-South Nigeria. The researcher used a structured questionnaire as her main instrument for data collection while percentage and frequency tables, mean, standard deviation and Pearson correlation were used for data analysis. The findings revealed that crop marketing, livestock marketing and fishery marketing have significant relationship with food security (food availability, food accessibility and food stability) in Nigeria.

Sharma and Sharma (2017) explored agricultural production, marketing and food security in India. The researchers employed the documentary research, focus group discussion and in-depth interview for data collection. The respondents comprised of agriculturalists and economists from universities in India. After analyzing the data collected, the researchers discovered that increase in agricultural production would ensure food security in India. The study also revealed that the level of agricultural production in India is too low to guarantee food security in India. The study equally reported that agricultural marketing would help to ensure the availability and accessibility to food in India.

Okechukwu et al (2020) examined the effect of agricultural marketing on food security in Nigeria. Their study employed the descriptive survey research design where a structured questionnaire to collect data from 350 respondents (farmers, wholesalers and retailers) in the four local government areas in Enugu State. After analyzing the data collected from the respondents using percentage and frequency analysis, mean and standard deviation, the researchers discovered that many people in Enugu State are food insecure as the volume of food production do not meet the growing population of people living in the area. The study also revealed that increase in agricultural production and extensive distribution and marketing of the products would ensure food security.

From the literature reviewed, it was observed that a significant number of studies have been conducted on agricultural marketing strategies but none of these studies relate agricultural marketing strategies (agricultural pricing strategy and agricultural distribution strategy) to sales performance (sales volume and sales turnover rate) of crop farmers in Nigeria particularly in Rivers State. This has created a gap in agricultural marketing literature which this study intends to fill.

METHODOLOGY

This study is a correlational research that utilizes the positivism research philosophy. The population of this study consisted of all the crop farmers in Rivers State. However, the exact number of crop farmers in the 23 local government areas of Rivers State is known, hence, the Cochran's formula was used to determine the sample size for the study. A sample size of 384 crop farmers was determined using the Cochran's formula. The sample size was drawn from the population randomly. A structured questionnaire was used to elicit data from the respondents. The questionnaire was validated using content analysis and its reliability was determined using the Cronbach Alpha method. Three hundred and eighty-four (384) questionnaires were administered to the respondents (crop farmers) and 352 copies were collected from them. The data collected were analyzed statistically while the hypotheses were tested Spearman Rank Order Correlation Coefficient (ρ). The SPSS version 24 was used to perform the correlation analysis.

RESULTS AND DISCUSSION

The result of the analysis carried out on the predictor and criterion variables of the study were presented and analyzed in this section. The data collected on agricultural marketing strategies (agricultural pricing strategy and agricultural distribution strategy) were correlated with the data obtained on sales performance (sales volume and sales turnover rate) using the SPSS version 24. The results of the analysis are presented in the tables below:

Table 1: Result of bivariate analysis between agricultural pricing strategy and sales volume of crop farmers

			Agricultural Pricing Strategy	Sales Volume
Spearman (rho)	Agricultural Pricing Strategy	Correlation Coefficient	1.000	.741**
		Sig. (2 tailed)	.	.001
		N	352	352
	Sales Volume	Correlation Coefficient	.741**	1.000
		Sig. (2 tailed)	.001	.
		N	352	352

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-Generated Output

Table 1 indicates that agricultural pricing strategy is strongly and positively correlated to sales volume of crop farmers ($\rho = .741^{**}$) and this correlation is statistically significant at 0.01 level. Based on this result, the null hypothesis (H_{01}) is rejected and the alternate hypothesis is accepted. This means that there is significant relationship between agricultural pricing strategy and sales volume of crop farmers in Rivers State.

Table 2: Result of bivariate analysis between agricultural pricing strategy and sales turnover rate of crop farmers

			Agricultural Pricing Strategy	Sales Turnover Rate
Spearman (rho)	Agricultural Pricing Strategy	Correlation Coefficient	1.000	.673**
		Sig. (2 tailed)	.	.001
		N	352	352
	Sales Turnover Rate	Correlation Coefficient	.673**	1.000
		Sig. (2 tailed)	.001	.
		N	352	352

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-Generated Output

Table 2 shows a strong and positive correlation between agricultural pricing strategy and sales turnover rate of crop farmers ($\rho = .673^{**}$) and this correlation is significant at 0.01 level. Based on this result, the null hypothesis (H_{02}) is rejected and the alternate hypothesis is accepted. This means that there is significant relationship between agricultural pricing strategy and sales turnover rate of crop farmers in Rivers State.

Table 3: Result of bivariate analysis between agricultural distribution strategy and sales volume of crop farmers

			Agricultural Distribution Strategy	Sales Volume
Spearman (rho)	Agricultural Distribution Strategy	Correlation Coefficient	1.000	.628**
		Sig. (2 tailed)	.	.001
		N	352	352
	Sales Volume	Correlation Coefficient	.628**	1.000
		Sig. (2 tailed)	.001	.
		N	352	352

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-Generated Output

Table 3 indicates that agricultural distribution strategy has a strong and positive correlation with sales volume of crop farmers ($\rho = .628^{**}$) and this correlation is significant at 0.01 level. Consequently, the null hypothesis (H_{03}) is rejected and the alternate hypothesis is accepted. This means that there is significant relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State.

Table 4: Result of bivariate analysis between agricultural distribution strategy and sales turnover rate of crop farmers

			Agricultural Distribution Strategy	Sales Turnover Rate
Spearman (rho)	Agricultural Distribution Strategy	Correlation Coefficient	1.000	.863**
		Sig. (2 tailed)	.	.001
		N	352	352
Sales Turnover Rate		Correlation Coefficient	.863**	1.000
		Sig. (2 tailed)	.001	.
		N	352	352

**Correlation is significant at 0.01 levels (2 tailed)

*Correlation is significant at 0.05 levels (2 tailed)

Source: SPSS-Generated Output

Table 4 shows a very strong and positive correlation between agricultural distribution strategy and sales turnover rate of crop farmers ($\rho = .863^{**}$) and this correlation is statistically significant at 0.01 level. Based on this result, the null hypothesis (H_{04}) is rejected and the alternate hypothesis is accepted. This means that there is significant relationship between agricultural distribution strategy and sales turnover rate of crop farmers in Rivers State.

Discussion of Findings

This study found a significant relationship between agricultural pricing strategy and sales volume of crop farmers in Rivers State. This finding was derived from the result of the bivariate analysis carried out on the two variables in the first hypothesis. The result revealed that agricultural pricing strategy is strongly and positively correlated to sales volume of crop farmers ($\rho = .741^{**}$) and this correlation is statistically significant at 0.01 level. Based on this result, the null hypothesis (H_{01}) was rejected and the alternate hypothesis was accepted. This means that there is significant relationship between agricultural pricing strategy and sales volume of crop farmers in Rivers State. This finding is supported by Deng (2024) who revealed that high or low market prices of organic agricultural products has significant impact on sales volume of agricultural firms. Feurer et al (2019) also agreed with this finding when they revealed that sales volume of agricultural firms will increase when the prices of their products are fixed strategically.

This study also found a significant relationship between agricultural pricing strategy and sales turnover rate of crop farmers in Rivers State. This finding emerged from the result of the correlation analysis carried out on the two variables in the second hypothesis. The result showed a strong and positive correlation between agricultural pricing strategy and sales turnover rate of crop farmers ($\rho = .673^{**}$) and this correlation is significant at 0.01 level. Based on this result, the null hypothesis (H_{02}) was rejected and the alternate hypothesis was accepted. This means that there is significant relationship between agricultural pricing strategy and sales turnover rate of crop farmers in Rivers State. This finding is in line the research conducted by Deshpande (2018) and Pippo (2018) as both studies revealed that agricultural pricing strategy has significant impact on sales turnover of firms.

This study discovered a significant relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State. This finding was deduced from the result of the correlation analysis carried out on the two variables in the third hypothesis. The result revealed that agricultural distribution strategy has a strong and positive correlation with sales volume of crop farmers ($\rho = .628^{**}$) and this correlation is significant at 0.01 level. Consequently, the null hypothesis (H_{03}) was rejected and the alternate hypothesis was accepted. This means that there is significant relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State. This finding is supported by Bawa (2015), Row (2021), and Germain (2017) as their studies revealed that intensive distribution strategy significantly enhance sales growth of agricultural firms.

Finally, it was reported that agricultural distribution strategy has significant relationship with sales turnover rate of crop farmers in Rivers State. This finding emanated from the result of the correlation analysis carried out on the two variables in the fourth hypothesis. The result showed a very strong and positive correlation between agricultural distribution strategy and sales turnover rate of crop farmers ($\rho = .863^{**}$) and this correlation is statistically significant at 0.01 level. Based on this result, the null hypothesis (H_{04}) was rejected and the alternate hypothesis was accepted. This means that there is significant relationship between agricultural distribution strategy and sales turnover rate of crop farmers in Rivers State. This finding is in line with the research conducted by Zhao et al (2021) and Choi et al (2018) as both studies reported that effective distribution strategy enhances the sales turnover of firms.

CONCLUSIONS

From the foregoing analysis, it is confirmed that agricultural marketing has the potentials of improving sales performance of crop farmers in Rivers State. The empirical results of this study proved this fact as agricultural pricing strategy was reported to have a significant relationship with sales volume of crop farmers in Rivers State. Agricultural pricing strategy was also proven to have a significant relationship with sales turnover rate of crop farmers in Rivers State. This study equally found a significant relationship between agricultural distribution strategy and sales volume of crop farmers in Rivers State. The study also discovered a significant relationship between agricultural distribution strategy and sales turnover rate of crop farmers in Rivers State. Based on these findings, it was concluded that agricultural marketing has a significant impact on sales performance of crop farmers in Rivers State.

RECOMMENDATIONS

The following recommendations are provided for the study:

1. That, crop farmers in Rivers State particularly those that are experiencing poor sales performance should adopt agricultural marketing strategies as it would improve their sales performance.
2. That, crop farmers in Rivers State particularly those that are producing perishable products should adopt low pricing strategy as it would attract more customers to their products and increase their sales volume.
3. That, crop farmers in Rivers State particularly those that are producing seasonal products should fix the prices for their products strategically as it would increase their sales turnover rate.
4. That, crop farmers in Rivers State especially those that are producing perishable products should adopt intensive distribution strategy as it would increase their sales volume and sales turnover rate.
5. Finally, it is recommended that crop farmers in Rivers State should review their agricultural marketing strategies to identify those areas that create room for loopholes and adjust them accordingly as it would improve their sales performance.

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