

Effect of Promotional Activities of Agricultural Cooperatives on Market Linkage of Rural Farmers in Anambra State

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Abstract

The study examined agricultural cooperative societies and market linkage of rural farmers in Anambra State, Nigeria. The study was motivated by the need to link rural farmers directly to markets through collective efforts of agricultural cooperatives and to serve to reduce exploitation by middlemen. The specific objectives are to: determine the extent to which standardisation has influenced market linkage of farmers in Anambra State, to examine the extent to which market research has influenced market linkage of farmers in Anambra State. The area of study is Anambra State where 388 members of agricultural cooperatives were selected from 870 registered agricultural cooperatives. The instrument used for data collection was the questionnaire. The study employed regression technique, mean, frequency and percentage in analysing the data obtained. The study found out that standardization and market research have a significant influence on market linkage of farmers in Anambra state at 5% level of significance (F ratio of 12.695, 46.354 @ 0.00% and 1% level of significance respectively). The study identified cooperatives as a veritable tool for market linkage and recommends the increase in technical, moisture and product weight standardization to improve market linkage, it also suggested that research on changing market trends and tastes of customers should be carried out occasionally.

Keywords: Market Linkage, Standardization, Promotional activities, Market Research

Introduction

Promotional activities are one of the best tools to attract new customers and retain old ones by adding more value to the product in order to stimulate consumer purchases and effectiveness of intermediaries. A highly competitive environment constantly forces sellers to use different promotional tools and strategies to win new customers and thereby increase their profitability. (Genchev and Todorova, 2017) The retail market is growing in a high velocity and as a result, sellers have started to enlarge their promotional activities towards customers. One of such activities is to use promotional tools and techniques which directly influence individual behaviour towards their products and improve customer loyalty (Shamout 2016). The concept of promotion is distinctive, they offer additional incentive to buy. Promotion is the set of marketing techniques or practices, marketing action, form of communication, aiming at overcoming a sales level by capturing the attention and by attracting potential buyers, through points of sale, information, belief, training and maintaining a customer interested in the product and the manufacturing company. (Alexandrescu and Milandru, 2018) Promotional activities consist of

extremely varied short-term promotional tools designed to generate the desired response from customers. (Genchev and Todorova, 2017)

Cooperative societies offer platforms to improve agricultural production, some of their activities include processing of members farm produce; construction of warehouses, provision for grading and standardization of product; standardization of weight and measures; daily dissemination of information on market prices of agricultural commodities, facilitates transport services etc (Anigbogu, Abdulahi, Nwachukwu & Halsal, 2016). With the development of trade freedom, people have gradually realised that grading and standardization of agricultural production is an inevitable trend of modern agricultural development. Agricultural cooperative societies have been touted as the appropriate vehicle for harnessing and pooling the resources of millions of small holder farmers together to enjoy the benefit of large-scale production (Onugu an& Abdullahi 2012)

Market linkage generally means facilitating trade relationships between the target population or “clients,” small producers, local firms and cooperatives, and the external market. It is essential that the farmers should be given access to linkage mechanisms through which they can clear their problems and needs in order to create a demand driven research and extension system. Linkage mechanisms are used to channel information between groups and to conduct required tasks in the process of getting relevant technologies timely to farmers. These mechanisms are important as they often network all participants and bring them together to share idea, inputs, information, expertise by the development chain, mechanisms of information flow, material flow and providing necessary services, ensure continuity, preserve continuous flow of information. Lightfoot and Scheuermeier (2007) noted that small-scale farmers are exploited and do not get a fair share of the final consumer price due to poor access to markets and marketing information. Both market opportunities and the assets and capacities of farming households are diverse. It is therefore necessary to ground market linkage work, and its implications, in an understanding of markets and farmers. Research and case studies show that not every smallholder is suited to the same type of market and will not require the same support services to reach a market. This represents a significant shift in how cooperatives, extension and advisory services must tailor the type of support they offer to the smallholder. (Ferris et al, 2014)

Statement of the Problem

The quality of agricultural commodities varies from year to year and from season to season and the growing conditions are such that unfavourable conditions may prevail, and the crops are of lower quality when farmers do not rely on standardization to price farm products of different qualities. (Nebo and Ejionueme 2017) Access to markets and marketing information by smallholder farmers depending on agriculture in developing countries have always been challenging. Factors such as lack of access to information limited their access to markets. These smallholders depend on traditional means of communication and sell their produce at the farm gate and local markets. This has not been fruitful for these poor farmers as traders, intermediaries and other stakeholders in the chain take a large share of their produce. (Magesa, 2015)

Market linkage represents a significant impediment to market access especially for smallholder poor farmers: it substantially increases transaction costs and reduces market efficiency. For any one crop, the marketing chain consists of multiple middlemen, each taking a margin at every stage of the

chain, and price variations in space and time are often large and erratic. Since farmers seldom sell their output on the main district markets, the sellers generally have less or little information about current prices while buyers are often well-informed, at least about the price in the district market where they are active. For farmers to take timely selling decisions and supply the commodities at markets where they could get better prices, the right kind of market information must reach them in time. (Siva-balan, 2015)

Objectives of the Study

The broad objective of the study is to examine the effect of promotional activities of Agricultural Cooperatives on market linkage among rural farmers in Anambra State. The specific objectives are to:

1. Determine the extent to which standardisation has influenced market linkage of farmers in Anambra State
2. Examine the extent to which market research has influenced market linkage of farmers in Anambra State

Research Hypotheses

Ho1: Standardisation has no significant effect on market linkage of farmers in Anambra State

Ho2: Market research has no significant effect on marketing linkage of farmers in Anambra State.

Literature Review

Concept of Market Linkage

The term market linkage implies a physical connection between the producer and the ultimate consumer. Linkages also involve financial transactions - the selling and buying of goods - and can be broadly defined in four different ways:

- By the form of financial transactions or type of intermediaries who undertake the transactions;
- By the channels through which transactions occur and the type of facilities used for transactions;
- By how they are linked together by transport and communications networks;
- By the spatial distribution of transactions - where they occur and whether this forms a pattern. (FAO, 2001).

Constraints Farmers face in accessing markets

Factors that may affect farmers' capacity to access to (and benefit from) agricultural output markets include:

High Production risk and lack of economy of scale: Since smallholders have low resource endowment, they tend to be highly vulnerable to production risks. Production risks are related to natural conditions and climatic shocks, which are likely to increase in the future (Ahmed, Diffenbaugh et al. 2009). In low-income countries, the intensification of production systems is often limited, which exacerbates farmers' vulnerability to production risks. Furthermore, farmers cannot achieve economies of scale since they

have poor productivity potential, partly resulting from their low endowment in production factors (especially land and capital assets) and from their lack of investments due to their aversion to risks.

Lack of bargaining power Bargaining power refers to the relative capacity of different actors to obtain favourable terms from the transaction. (Maitre d'Hotel, 2011) It is strongly related to access to information, to producer distance (which implies a lack of alternatives) as well as to the perishability of the products. The bargaining power of the small producers is especially low since they have poor access to market information and limited access to financial markets which prevent them from selling their products at the most profitable period. Their lack of bargaining power may lead them to under-value their production and obtain a smaller share of the added value created in the commodity chain.

Promotional Activities

Promotion is the set of marketing techniques or practices, marketing action, form of communication, aiming at overcoming a sales level by capturing the attention and by attracting potential buyers, through points of sale, information, belief, training and maintaining a customer interested in the product and the manufacturing company. (Alexandrescu and Milandru, 2018) The essential features of promotional are: the direct, immediate, concrete character; the presence of an advantage, addition, supplement etc; the ephemeral character; its connection with a defined product; its origin (manufacturer, distributor, professional organisations) and its various targets (consumers); its link to the marketing mix as a whole. (Alexandrescu and Milandru, 2018) Promotional activities are also known as marketing. Cooperative societies offer platforms to improve agricultural production, some of their activities include processing of members farm produce; construction of warehouses, provision for grading and standardization of product; standardization of weight and measures; daily dissemination of information on market prices of agricultural commodities, facilitates transport services etc (Okonkwo, et. al. 2021; Anigbogu, Abdulahi, Nwachukwu and Halsal, 2016)

Agricultural Cooperatives

Agricultural Cooperatives or Farmers Cooperatives is a business organisation in which a group of individuals who have common interests agreed to pool their resources together for production or to distribute goods and services for the purpose of maintaining/increasing the welfare of its members. An agricultural cooperative, also known as a farmers' co-op, is a cooperative where farmers pool their resources in certain areas of activity. Agricultural Cooperative is considered to be one of the most important organization that pays attention and tries to support rural development so as to reduce poverty. Agriculture remains the major source of income and employment in rural areas and majority of cooperatives are found in agricultural sector. In recent years, agricultural cooperatives around the world have been promoting a new agenda for sustainable development. (Tumenta, Amugwa & Nformi, 2021; Okonkwo, et. al. 2018). Agricultural cooperatives are therefore created in situations where farmers cannot obtain essential services from IOFs (because the provision of these services is judged to be unprofitable by the IOFs), or when IOFs provide the services at disadvantageous terms to the farmers (i.e., the services are available, but the profit-motivated prices are too high for the farmers)

A practical motivation for the creation of agricultural cooperatives is sometimes described as "overcoming the curse of smallness". A cooperative, being an association of a large number of small

farmers, acts as a large business entity in the market, reaping the significant advantages of economies of scale that are not available to its members individually. A family farm may be too small to justify the purchase of a tractor or another piece of farm machinery for its own use; a machinery pool is a cooperative that purchases the necessary equipment for the joint use of all its members as needed. A small farm does not always have the means of transportation necessary for delivering its produce to the market, or else the small volume of its production may put it in an unfavourable negotiating position with respect to intermediaries and wholesalers; a cooperative will act as an integrator, collecting the output of its small members and delivering it in large, aggregated quantities downstream through the marketing channels (Otaokpukpu, et. al. 2017; Ugwa, et. al. 2015). A small farmer may be charged relatively high interest rates by commercial banks, which are mindful of high transaction costs on small loans or may be refused credit altogether due to lack of collateral; a farmers' credit union will be able to raise loan funds at advantageous rates from commercial banks because of its large associative size and will then distribute loans to its members on the strength of mutual or peer-pressure guarantees for repayment.

Standardization

International Standards Organisation defined standardization as the process of applying rules for an orderly approach to a specific activity for the benefit and with the cooperation of all concerned, for the promotion of optimum overall economy taking due account of functional conditions and safety requirements. (Mwambalaswa, 2016) Standardization is the determination of the standards to be established for different commodities. It can be defined as the determination of the basic limits on grades or the establishment of model processes and methods of producing, handling and selling goods and services. Thus, standardization aims at making quality specifications uniform among the buyers and the sellers over space and time. Standards are established based on certain characteristics such as weight, size, colour, appearance, texture, moisture content, staple length amount of foreign matter, ripeness, sweetness, taste, chemical content, etc. termed grade standards. Thus, standardization means making the quality specifications of the grades uniform among buyers and sellers over space and time. The aim of agricultural standardization is to guide and specify agricultural planting, processing, management and sale activities, achieve improved crop yield and quality as well as to promote economic, social and ecological profits (Wan, Zhang, Jiang, Ji and Zhang 2016)

Standardization provides a means for market linkages with the right practices in place. If factors such as the product weight standards, moisture content standards, chemical content standards, product uniformity, technology standards, technical know-how standards are effected for farmers by their cooperative societies, market access for their members will be strengthened and it will yield competitive returns for farm operators.

Market Research

Market research is a process of gathering, analyzing and interpreting information about a market, about a product or service to be offered for sale in that market, and about the past, present and potential customers for the product or service; research into the characteristics, spending habits, location and

needs of your business's target market, the industry, and the competitors you face. (Al-Shatawani, Osman and Ab-Halim, 2014) Market Research can be defined as the function that links the consumer, customer and public through information - information used to define marketing opportunities and problems; generate, refine and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process. (Babin, D'Alessandro, Winzar and Lowe, 2020) Marketing research often focuses on understanding the "Customer" (purchasers, consumers, influencers), the "Company" (product design, promotion, pricing, placement, service, sales), and can also be expanded toward the environment to include "Competitors" (and how their market offerings interact in the market environment). (Smith and Albaum, 2010)

Market research is very important for business development and the possibility of creating a new way for developing agriculture. Marketing research is the systematic and objective search for, and analysis of information relevant to the identification and solution of defined problems. (Zuzaku, 2015). The task for marketing research is to help specify and supply accurate information to reduce uncertainty in decision making. (Babin, Alessandro, Winzar and Lowe, 2020) Market Research is important for market linkage as it helps farmers identify the right produce, appropriate buyers, the right market, the right time and the right price. With the aid of agricultural cooperative societies, farmers can easily carry out market research to better understand market trends, review competitors, as making good decisions depend on accurate information. Market research also aids market linkage by helping farmers access new products and practices. New products and practices are introduced into the market every year including crop protection products, crop nutrition material, new seed genetics, seed treatment, seed genetics, cover crops, application methods, seeding rates and this knowledge helps farmers thrive in the dynamic market environment (Gross 2019)

Methodology

Research Design

Research design connotes the approach researcher(s) intends to take in carrying out the study, a survey research design approach will be adopted. This design is appropriate because it will not be practicable to study the entire population. In this design, a group of items are studied by collecting and analyzing data from a few members considered being a representative of the entire group.

Area of Study

The study was conducted in Anambra State which is in South-Eastern Nigeria. Anambra State is in the eastern part of Nigeria and it was carved out from the old Anambra State in 2011. The Capital and the Seat of Government is Awka, while Onitsha and Nnewi are the biggest and Industrial cities. The State theme is "Light of the Nation". The boundaries are formed by Delta State to the west, Imo State and Rivers State to the south, Enugu State to the East and Kogi State to the North. The state has twenty-three local government areas and three senatorial zones namely Anambra Central, Anambra South and Anambra North. Anambra is rich in natural gas, crude oil, bauxite, ceramic and has an almost 100

percent arable soil. The state is predominately occupied by the Igbo ethnic group who by nature are farmers, fishermen, craftsmen and traders. Among crops grown by farmers in the state are yam, palm produce, rice, cassava, cocoyam, vegetables and different varieties of fruit trees among others. They are also involved in fishing, particularly those living in the riverside areas in the state, though its mineral resources remain untapped, Anambra State is rich in natural gas, crude oil, bauxite, ceramics and arable soil. Anambra State boasts of undulating landscape with tall trees and rich vegetation that is green all year round. The state experiences two major seasons, the rainy season which starts at the end of the month of March and lasts till end of October and the dry season which starts in the month of November and ends in the month of March. It records about 3,000mm of rainwater per annum, this makes the area suitable for agricultural production.

Population of the Study

The population of the study is made up of members of agricultural cooperatives in Anambra State. There are four agricultural zones in Anambra State: (Anambra zone, Onitsha zone, Awka zone, Aguata zone), and the twenty-one (21) local governments in Anambra State are divided within each of these zones. The state has a total of three thousand four hundred and eighty-six (3486) registered cooperative societies with a membership strength of seventeen thousand four hundred and thirty-six (17436) out of which two thousand eight hundred and fifty-six (2856) are agricultural cooperatives with a membership strength of thirteen thousand four hundred and eighty-four (13484) and 870 registered agricultural cooperatives from the selected zones, which served as the population of the study. (Source: Department of Cooperatives, Ministry of Trade, Commerce, Market and Wealth creation, Anambra State, 2021)

Sample Size Determination

In order to determine the sample size for the study, Taro Yamane's formula was used for a finite population. The formula is given as:

$$n = N / (1 + N(e)^2)$$

Where n = sample size

N= Population of the study

E= Sampling error (in this case 5 percent)

The sample size is therefore computed as follows:

From the above, $n = 13484 / 1 + 13484(0.05)^2$

$$n = 388$$

Sampling Technique

Multi-stage sampling technique was used to determine the actual sample of the study. This was carried in four stages. According to Chukwuemeka (2002), multi-stage sampling is somewhat the combination

of other sampling techniques. The first stage was the random selection of two agricultural zones (Anambra zone & Aguata zone) from the four agricultural zones (Anambra zone, Onitsha zone, Awka, zone and Aguata zone) using simple random sampling technique. In the second stage, judgmental sampling was used to select four Local Government Areas (Ayamelum LGA, Orumba South LGA, Anambra West LGA and Oyi LGA) as advised by the Development Officers at the Ministry of Agriculture, and also because these Local government Areas constitute the food basket of Anambra State. In third stage, simple random sampling was used to select three towns each from each of the four selected Local Government Areas in the zones, making a total of twelve towns. In the fourth stage, simple random sampling technique was again used to select two cooperative societies from each of the twelve towns making a total of twenty-four (24) cooperative societies. See table 1 below:

Table 1: The LGAs Selected, Towns, Names of societies, their membership strength and sample size

	Names of societies	L.G.A	Total
1.	Ezi Anam (Fcs) Multipurpose Cooperative Society Ltd.	Anambra West	13
2.	Chigozie Umuoba Anam Fmcs Ltd.	Anambra West	12
3.	Akachukwu Cooperative Society	Anambra West	15
4.	Ofuobi Fmcs Ltd	Anambra West	10
5.	Ufedo (Inoma) Fmcs Ltd	Anambra West	16
6.	Eddo-Ekeji Inoma Mcs	Anambra West	20
7.	Olubueze Mcs	Ayamelum	16
8.	Afamaefuna Fmcs	Ayamelum	27
9.	Oganiru-Amaka Mcs	Ayamelum	19
10.	Opetepe Fmcs	Ayamelum	14
11.	Young Women Umuerum Coop Society	Ayamelum	12
12.	Oludinma Fmcs	Ayamelum	13
13.	Unique Women (Ezira) Fmcs	Orumba South	20
14.	Ndiamaka Ogboji MCS	Orumba South	30
15.	Ezinne (Owerre-Ezukala) Rice Fmcs	Orumba South	18
16.	Chidinma Umunze MCS ltd	Orumba South	18
17.	Nwachinemerem (Ogboji) MCS Ltd	Orumba South	13
18.	Otuifunanya Cooperative Society	Orumba South	14
19.	Chukwudinma Umunya Fmcs	Oyi	20
20.	United Obiagu Umunya Mcs, Ltd	Oyi	12
21.	Ekwueme Fmcs	Oyi	13
22.	Uche-God Mcs	Oyi	10
23.	Nkiruka Nteje (NPFS) Mcs Ltd.	Oyi	14
24.	Udoamaka Ikenga Nteje (NPFS) Fmcs	Oyi	19
			388

Source: Computation from Field Survey, 2022

Data Analysis

The data collected from administered questionnaire was analysed using descriptive statistics; frequency counts, percentage, and mean scores to answer the research questions. The data was then sorted out based on nominal scales and then analysed based on the hypothesis of the study while inferential

statistics such as linear regression analysis will be adopted in the test of hypotheses at 5% level of significance.

PRESENTATION AND ANALYSIS OF EMPIRICAL RESULTS

Demographic Data of the respondents.

The socio-economic characteristics (bio-data) of the respondents were presented according to their gender, age distribution, educational qualification, years of cooperative experience, marital status, type of farming experience, and type of Agro-business.

Table 2 shows the bio-data of the respondents. (N= 388)

Table 2: Distribution According to the Bio data of Respondents

Variable	Frequency	Percent (%)	Cumulative (%)
Gender			
Male	289	74	7.6
Female	99	26	12.2
Total	388	100.0	
Age (Years)			
Less than 20	23	5.9	17.2
21-30	84	21	40.2
31-40	187	48	81.2
41- 50	64	16	10.4
51 -60	23	5	
61 and above	07	1.8	100
Total	388	100	
Educational Qualification			
Not Educated	36	9.27	40.6
Primary	186	47.9	24. 5
Secondary	103	26.5	82.4
Tertiary	63	16.2	100
Total	388	100.0	
Years of Cooperative Experience			
1-5	176	45.3	25.0
6 – 10	171	44.0	64.8
11 – 15	31	7.9	91.5
15 – 30	10	2. 5	100
Total	388	100	
Marital Status			
Married	136	35.0	68.5
Single	153	39.4	100.0
Widow/ widower	93	23.9	38.6
Total	388	100.0	
Type of Farming			
Arable (Crop) Farming	176	45.3	34.2
Pastoral (Livestock) Farming	196	50. 5	26.0

Mixed (Crop & Livestock farming)	16	4.12	81.2
Total	388	100.0	
Type of Agro business			
Production	17	4.38	100
Manufacturing	66	17.01	90.3
Processing	284	73.1	73.4
Service	21	5.4	95.7
Total	388	100	

Source: Field Survey, 2022

The presentation and analysis of data collected from the field was carried out in this section. The aim is to present the data in an interpretable form so that the variables of the study can be well understood.

As shown in table 2, it reveals that 74% of the respondents are males while 26% are females. This indicates that most of the farmers in the state are males. The age of the respondents ranges from less than 20 (5.9%), 21-30 (84%), 31- 40 (48%), 41- 50 (16%), 51- 60 (5%), and 61 years and above (1.8%) respectively. This indicates that most of the farmers are elderly and mature. The data for respondents educational qualification showed 9.27% are not educated, 47.9% (primary), 26. 5% (secondary) while 16.2% (Tertiary) this means that a higher percentage of the farmers have basic knowledge. The years of cooperative experience of the respondents ranging from 1-5 (45.3%), 6-10 (44%), 11-15 (7.9%) and 15 years and above (2.5%) respectively. This means that most of the farmers have spent considerable number of years as cooperative members. 35% of the respondents are married, 39.4% are single while 23.9% are widow/widowers. The nature/type of their farming business ranges among arable farmers (45.3%) Livestock (50.5 %) while (4.12%) are mixed farmers. This means that most of respondents are into livestock farming. The type of agro business as indicated by respondents revealed 4.38% of the respondents are into production, 17.01% are into manufacturing, 73.1% are into processing business while 5.4% are into the service business. This then shows that most of the respondents are into the processing type of agricultural business.

Tests of Hypotheses

Test of hypothesis one: Influence of Standardisation on market linkage of farmers in Anambra State

Ho₁: Standardisation has no significant effect on market linkage of farmers in Anambra State.

Ha₁: Standardisation has significant effect on market linkage of farmers in Anambra State

Table 3: Regression Estimates (Influence of Standardisation on market linkage for farmers in Anambra State).

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	5.435	.425	12.790	.000
Product weight standards have influenced your market linkage (X ₁)	-.101	.064	-1.584	.114
Moisture content standards has influenced your market linkage (X ₂)	.071	.068	1.046	.296
Chemical content standards have influenced your market linkage (X ₃)	-.188	.092	-2.028	.043
Product uniformity standards have influenced your market linkage (X ₄)	-.024	.077	-.313	.754
Technology standards have influenced your market linkage (X ₅)	.100	.075	1.337	.182
Technical know-how standards has influenced your market linkage (X ₆)	-.169	.068	-2.494	.013

Residual Standard Error: 3.8772

R: .401; R²: .141; Adj. R²: .106

F Statistic: 12.695; the p-value is 0.000

It is seen from table 4.3.1 that the R² was estimated at 0.141 which means that about 14% of the variations in the effects of standardization on the market linkage of farmers is explained by the explanatory variables included in the model. The F ratio of 12.695 was significant at 1% level. Indeed, each of the items in the model had positive relationship with the income of the respondents.

DECISION: The regression result shows that the F ratio of 12.695 is significant at 0.00 levels. We therefore reject the null hypothesis two and conclude that standardization has significant effect on market linkage of farmers in Anambra state.

Test of hypothesis two: Effect of Market research on the market linkage of farmers in Anambra State

H₀₂: Market research has no significant effect on the market linkage of farmers in Anambra State

H_{a2}: Market research has significant effect on the market linkage of farmers in Anambra State.

Table 4: Regression Estimates (Effect of Market research on the market linkage of farmers in Anambra State).

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	6.712	.538	16.964	.000
Research on proposed consumers has influenced the market linkage of farmers (X ₁₉)	.057	.138	.413	.680
Research on competitors has influenced the market linkage of farmers (X ₂₀)	.276	.167	1.654	.099
Research on market trends has influenced the market linkage of farmers (X ₂₁)	-.165	.197	-.835	.404
Research on marketing channels has influenced the market linkage of farmers (X ₂₂)	-.061	.113	-.545	.586
Research on market size has influenced the market linkage of farmers (X ₂₃)	.356	.171	2.076	.039
Research on current prices has influenced the market linkage of farmers (X ₂₄)	.099	.128	.776	.438
Residual Standard Error: 34.7891				
R: .187; R ² : .237; Adj. R ² : .210				
F Statistic: 46.354; the p-value is 0.000				

As indicated on table 4.3.4 that the R^2 was estimated at 0.210 which means that about 21% of the variations in the effects of market research on market linkage as explained by the explanatory variables included in the model. The F ratio of 46.354 was significant at 1% level. Each of the items in the model had positive relationship with financial inclusion of the respondents apart from X₂₁ and X₂₂ which states that there is a linkage between market research and market linkages of farmers. Similarly, of the six proxy variables only X₁₉, X₂₀, and X₂₃, and X₂₄ had significant relationship with market linkages at the 1% levels.

DECISION: The regression result shows that the F ratio of 46.354 is significant at 0.00 levels. We therefore reject the null hypothesis four and conclude that market research has significant effect on marketing linkage of farmers

CONCLUSION AND RECOMMENDATION

The study investigated the effect of promotional activities of agricultural cooperatives on market linkage among rural farmers in Anambra state. The dependent variable (promotional activities) was proxied by

its index standardization and market research was measured with The study utilized primary data basically which were extracted from the distributed questionnaire. The study reveals that standardization, and market research has a significant influence on market linkage of farmers in agricultural cooperatives and it recommends that several standardization methods such as technical standardization, moisture standardization, product weight standardization need to be increased to improve the quality of goods provided by farmers in order to improve their access to markets and there is need for agricultural cooperative to carry out frequent market research on the changing trends and taste of consumers to ensure stronger market access.

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