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Preface

The Nigeria Journal of Cooperative Economics and Management (NJCEM) is an academic and professional peer reviewed journal published by the Department of Cooperative Economics and Management, Nnamdi Azikiwe University, Awka-Nigeria. This journal is an outcome of the tireless teamwork and contributions of our staff, research scholars, and other eminent experts in the field of Cooperative Economics and Management.

Our department is one of the centers of research and learning in the area of cooperative theory and practice. We take immense pride in our mission to advance knowledge and create awareness in the field of Cooperative Economics and Management. This journal is in line with this vision and is designed to provide a platform for scholars to share their research, insights, and experiences on Cooperative Science and closely related fields. The aims are to create a resourceful platform to foster debate, discussions, and knowledge exchange around the critical issues affecting cooperatives worldwide.

The Journal welcomes the submission of manuscripts that meets up with the standard of scientific excellence. Papers submitted will be published approximately two months after acceptance. All accepted papers are typed on A4 size with wide margins and double line spacing in 12 fonts. It should not exceed 15 pages including the abstract of not more than 250 words. Not more than five keywords should be provided immediately after abstract. The paper should be empirical or theoretical, well researched, and persuasive. Contributors should include: brief profile of the author including institutional affiliation and status, title of paper, abstract, introduction, statement of problem, review of related literature, method of investigation, discussion of findings and recommendations. Authors should include their e-mail addresses.

Manuscripts must be in conformity with the American Psychological Association (APA) documentation style 6th edition. Journal titles should be abbreviated for multiple citations in the same year, a,b,c, should be used immediately following the year of publication.

It is our hope that this journal will contribute significantly to the growth and development of the cooperative movement and inspire new generations of scholars and practitioners to explore and advance the cooperative model as a viable and sustainable alternative to conventional business models.

We would like to express our deep gratitude to all those who have contributed to this journal and helped us bring it to fruition. We hope that this journal will serve as a valuable resource for those seeking to understand and promote Cooperative Economics and Management.

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WORKING CAPITAL MANAGEMENT AND PERFORMANCE OF AGRICULTURAL COOPERATIVE SOCIETIES IN IMO STATE, NIGERIA.

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Abstract

The study examines working -capital management and performance of agricultural cooperative societies in Imo State, Nigeria. The study was motivated by the need to determine the influence of working capital management on cooperative performance. The specific objectives are to: ascertain the extent to which accounts receivables influences cooperative members return on Investment (ROI) in Imo State and determine the extent to which accounts payable influence cooperative members return on Investment (ROI) in Imo State. The area of study is Imo State where samples of 139 cooperatives were selected from the population of 213 registered cooperatives in the study area. The instrument used for data collection was questionnaire. The study employed regression technique, one sample T-test, mean, frequency and percentage in analyzing the data obtained. The study found out that the P-value of 0.031 is less than the alpha value 0.05 and is found to be significant. It was also found that account receivables affect cooperative profitability and size of dividend and welfare package. It was also revealed that accounts payable on cooperative performance ensures delivery of orders, increases credit worthiness, brings about sustainable stakeholder relations and increases inventory size. The study therefore recommends that proper management of various components of working capital need to be maintained to ensure adequate amount of working capital and liquidity. In order to successfully run the cooperative that control measures need to be taken on stock so as to help in preventing stock outs and also help in decision making in the procurement function. Proper training need to be organized by the cooperatives to ensure that the executives are well trained to execute working capital management practices which will in turn lead to improvement in the profitability of operations, managerial efficiency, minimize financial risk and ensure liquidity.

Keywords: Working capital management; performance; agricultural cooperative; return on investment

Introduction

Working capital management has become an interesting construct that has attracted the minds of researchers, scholars and accountants globally, particularly in Nigeria where small businesses find it difficult to access funds. The survival of any organization whether profit oriented or not, irrespective of size and nature of business depends on how its working capital is being managed (Fasesin, Ayo Oyebiyi & Folajin, 2017). Working capital management deals with the management of all aspects

of both current assets and current liabilities to minimize the risk of going bankrupt and at the same time increasing returns on assets (FTC Foulks Lynch, 2005). As cited by Wambugu (2013) it involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet short term obligations as they fall due and avoiding excessive investment in the current assets. This requires a combination of techniques which includes cash management, inventory management, payables management and receivables management (Ejelly, 2004). As a critical part of the financial management any organization, working capital assumes an imperatives part in the growth of shareholder's wealth. Extant literature has shown a positive link between working capital management and profitability of the larger manufacturing companies (Gorondutse, Ali, Abubakar & Naalah, 2017; Chatterjee, 2010; Davis, 2016).

Discussions on working capital management focus mainly on SMEs and large business organizations, partly because most of the researchers do not come from cooperative background. Cooperative as an organizational form also runs businesses like other conventional businesses that employ working capital in their day to day business operations. It is involved in cash management, inventory management practices, accounts receivables and account payable. These elements are the major components of working capital construct. Therefore, cooperative as one of the most effective vehicles for organizing modernized production and also arguably one of the most important pre-condition for efficient mobilization of production recourses and accelerated business progress seems not to have been given due accentuation as it concerns working capital management.

Again, like every other business, the cooperatives manages their short-term capital and also promote a satisfying liquidity, profitability and shareholders' value which is the main cruse of working capital management. According to Fasessin, Ayo-Oyebiyi and Folajin (2017), working capital management is the ability to control effectively and efficiently the current assets and current liabilities in a manner that provides the firm with maximum return on its assets and minimizes payments for its liabilities. In recent time investors-both in cooperative and none cooperatives businesses are critical and also skeptical about their Return on Assets (ROA), Net Operating Profit (NOP) and Return on Equity (ROE). The vision of the cooperative development policy is to promote members' entrepreneurial capacities so that they can generate adequate surpluses for themselves and create opportunities for economic progress for the public (Oladejo, 2013). For an economy to experience development, two conditions are necessary and sufficient. These are the presence or availability of entrepreneur and providers of external finance (Oladejo, 2013). In line with the above assertion as it concerns cooperative businesses, if the available finance is not properly managed the business will collapse and investors will lose their money.

However, the management of working capital in any industry or business is a well thoughtful effort that cannot be over-emphasized. In most developing countries like Nigeria, cooperative movement is seen as a means of general economic development and increased agricultural production. Agricultural cooperative were the first to evolve in the history of Nigeria. Their primary objectives are the dispersal and marketing of farm products to her members at the least possible price. They also help in the procurement of farm inputs to their members at reasonable cost and at appropriate time.

Statement of the Problem

This study was necessitated by the perceived unimpressive performance of cooperative societies that has made the organizational form not to be seen as proactive in solving the business concerns of the populace. Arguably, most of the cooperatives apart from credit cooperatives hardly survive one decade of their business operation. This poor and unsatisfactory performance has been attributed by scholars to poor financial performance (Oladejo, 2013). Return on asset has been negative and assets continue to liquidate without replacement. Some of these cooperative are suffering from bad debt and unrecoverable loans; making it difficult for them to meet their financial obligation towards their creditors. According to (Nnadozie et al, 2015) who studied cooperatives in Nigeria, cash management has caused disagreement as people charged with cash management embezzle the money or get involved in frivolous spending. The problem was exacerbated by poor record keeping especially as it relates to account payable and account receivable. All these situations revealed that bankruptcy of some cooperatives can be linked to poor working capital management.

However, the attention of researchers and scholars seem not to have been drawn to ascertain the extent of working capital management in cooperatives and how it affects their performance. In as much as this area has been studied in the context of profit-oriented businesses, findings did not consider peculiarities of cooperatives. Working capital management is identified in literature as very important in measuring and balancing between risk and efficiency of firm's performance. However, working capital adequacy in cooperatives in Imo State need to be determined not only to ensure that they are adequately capitalized but also to ensure their solvency. As cooperatives and other business brace up for digitalization, the importance of understanding working capital management practices such as inventory control, cash management and relationship between accounts receivable and payable becomes significant. Cooperatives can win investors' confidence and attract funds if their working capital activities improve return on investment and assets. This study is therefore focused on examining the relationship between working capital management and performance of cooperatives. Various components of working capital were measured against various measures of cooperative performance.

Objectives of the Study

The broad objective of this study is to determine the influence of working capital management and performance of cooperative societies in Imo State Nigeria. The specific objectives of this study are to:

- i. Ascertain the extent to which Accounts receivables influences cooperative members return on Investment (ROI) in Imo State.
- ii. Determine the extent to which Accounts payable influences cooperative members return on Investment (ROI) Imo State.

Research Questions

The following research questions are meant to guide the study.

- i. To what extent have accounts receivables influences cooperatives members return on investment (ROI) in Imo State?
- ii. To what extent has accounts payable influence cooperative members return on Investment (ROI) in Imo State?

Research Hypotheses

The following hypotheses are designed to guide the study:

H₀₁: Accounts receivables do not have significant influence on cooperative members return on Investment (ROI) in Imo State.

H₀₂: Accounts payable does not have significant influence on cooperative members return on Investment (ROI) In Imo State

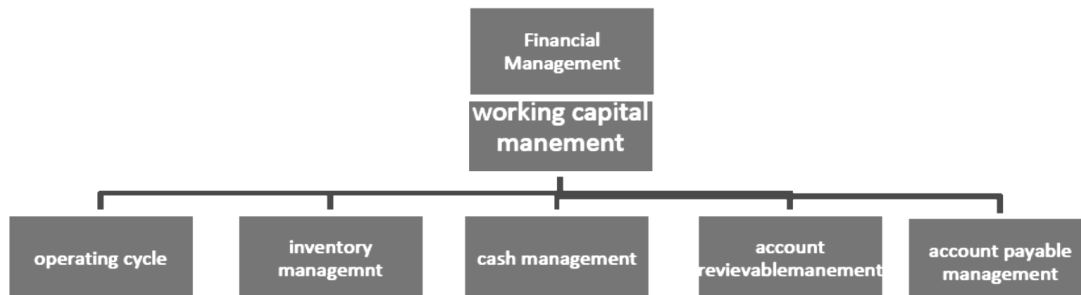
Review of Related Literature

Working Capital Management

Aravindan and Ramanathan (2013) were of the opinion that working capital management deals with decisions regarding the tradeoff between liquidity and profitability. Working Capital Management (WCM) refers to all the strategies adopted by the company to manage the relationship between its short term assets and short term liabilities with the objective to ensure that it continues with its operations and meet its debt obligations when they fall due. In other words, it refers to all aspects of administration of current assets and current liabilities.

Working capital management represents the decision about the manipulation of ratios which involves managing the relationship between a firm's current assets and current liabilities. One of the main purposes of working capital management is to provide sufficient liquidity to sustain firm's operations and to have to meet its obligations (Ejelly, 2004). All firms, regardless of their size and industry need to acquire positive cash flow and liquidity. The way that working capital is managed has also noted unworthy effects on the firm's profitability. For a firm's trading activities, working capital can be considered as a spontaneous fund, and the amount of funds tied up to current assets can exceed that of fixed assets in many firms. In this context, funds committed to working capital can be seen as hidden sources that can be used for

improving firm's profitability. Hence it is the fact that working capital management involves a trade - off between profitability and risk. According to the theory of risk and return, investments with higher risk may create higher returns. Thus a firm with high liquidity of working capital will have low risk to meet its obligation and low profitability at the same time. Therefore, efficient working capital management plays a significant role in overall corporate strategy in order to increase shareholder value by determining the composition and level of investments on current assets, the level sources and mix of short-term debt. Especially, an efficient working capital management can enable a firm to react quickly and genuinely to unexpected changes in economic environment and gain competitive advantages over its rivals. An efficient working capital management primarily aims to ensure an optimum balance between profitability and risk (Ejelly, 2004).



Source: Mengesha, 2014.

Fig 1.1: The Concept of Working Capital Management

Working Capital

Horne and Wachowicz (2000) define working capital as the nerve center and the life blood of any business. The excess of current assets over current liabilities is the firm's Working Capital. Working capital is required for daily routines and operations, such as paying salaries, suppliers, creditors, etc. Working Capital is a measure of the firm's liquidity. It is calculated using the assets and liabilities listed on the Balance Sheet. A significant amount of working capital indicates healthy levels of liquidity. Assets that increase over time are a good indication of the firm's growth. Effective current asset planning is the ability to accurately forecast sales, and match production schedules with the sales forecast. When actual sales and forecast sales are different, inventory reductions or build-ups likely occur, which affect receivables and cash flow.

Typically, a firm's fixed assets slowly increase as its capacity for production grows and equipment is upgraded. Current assets which are dependent on production and sales levels, however, fluctuate in the short-term. Inventory increases as the firm produces more than it sells. When sales outpace production, inventory decreases and receivables rise.

There are two concept used for working capital, which are;

1. Gross Working Capital
2. Net working Capital

1. Gross Working Capital

The sum total of all current assets of a business concern is termed as gross working capital (Trisha, 2016). In other words, gross working capital is the total amount available for financing of current assets. However, it does not reveal the true financial position of an enterprise. Borrowing will increase current assets and, thus, will increase gross working capital but, at the same time, it will increase current liabilities also. As a result, the net working capital will remain the same. This concept is usually supported by the business community as it raises their assets (current) and is in their advantage to borrow the funds from external sources such as banks and the financial institutions (Sinha, 2014).

In this sense, the working capital is a financial concept. As per this concept:

Gross Working Capital = Total Current Assets

Net Working Capital

Working capital is made up of the net sum of current asset minus current liabilities and is often referred to as the net working capital (Penman, 2013). The net working capital is an accounting concept which represents the excess of current assets over current liabilities. Current assets consist of items such as cash, bank balance, stock, debtors, bills receivables, etc. and current liabilities include items such as bills payables, creditors, etc. Excess of current assets over current liabilities, thus, indicates the liquid position of an enterprise. The ratio of 2:1 between current assets and current liabilities is considered as optimum or sound. What this ratio implies is that the firm enterprise has sufficient liquidity to meet operating expenses and current liabilities. It is important to mention that net working capital will not increase with every increase in gross working capital. Importantly, net working capital will increase only when there is increase in current assets without corresponding increase in current liabilities (Sinha, 2014).

Thus, in the Form of a Simple Formula:

Net Working Capital = Current Assets - Current Liabilities

After subtracting current liabilities from current assets what is left over is net working capital.

Working capital normally refers to net working capital. The banks and financial institutions do also adopt the net working capital concept as it helps assess the requirement of the borrower. Yes, if in any particular case, the current assets are less than the current liabilities, then the difference between the two will be called 'Working Capital Deficit'. What this deficit in working capital indicates is that the funds from current sources, i.e., current liabilities have been diverted for acquiring fixed assets. In such case, the enterprise cannot survive for a long period because current liabilities are to be paid out of the realization made through current assets which are insufficient. (Sinha, 2014).

Working capital is the net investment as a result of a business in commissioning current assets (such as cash and bank, inventories, and trade receivable) and commissioning current liabilities (such as overdraft and trade payables). More over Working capital management is the managing of current resources as well as current liabilities (Creswell, 2003; Ward, 2010). The management of working capital is very crucial element in firm performance, (Paul & Boden, 2008).

Components of Working Capital Management

There is often interrelationship among the working capital components which create real challenges for the financial managers. Thus the different components of working capital management of any organization are: (Edupristine, 2015).

1. Cash Management:

One of the most important working capital components to be managed by all organizations is cash and cash equivalents. It is needed for performing all the activities of a firm, i.e. from acquisition of raw materials to marketing of finished goods. Therefore it is essential for a firm to maintain an adequate cash balance. One of the important functions of a finance manager is to match the inflows and outflows of cash so as to maintain adequate cash (Edupristine, 2015).

2. Receivables Management

The term receivable is defined as any claim for money owed to the firm from customers arising from sale of goods or services in normal course of business. The term account receivable represents sundry debtors of a firm. It is one of the significant components of working capital next to cash and inventories. The total volume of accounts receivable depends on its credit sale and debt collection policy, these two significantly influence the requirement of working capital. A firm grants trade credit to protect its sales from competitors and to attract potential customers to buy its product at favorable terms (Pandey, 2010; Waweru, 2011). Liberal credit policy increases the volume of sales but at the same time it also increases the investment in receivables. Therefore, examination of costs and benefits associated with credit policy is one of the important tasks of a finance manager.

i. Cost of Maintaining Accounts Receivables:

The following are costs associated with maintaining accounts receivables:

Capital Cost

There is a time gap between the sale of goods and payment by debtors during which time the firm has to arrange funds for meeting their obligations like payment for raw materials, wages, etc. This additional financing involves some cost, known as capital cost. Collection Cost: Collection costs are the administrative costs incurred by the firm for collecting money from the debtors.

Default Cost:

Default cost is the cost that arises from bad debt losses.

Delinquency Cost:

These costs arise for extending credit to defaulting customers. Such costs are legal charges, costs involved in putting extra effort for collection, costs associated with sending reminders, etc.

Formulation of Credit Policies:

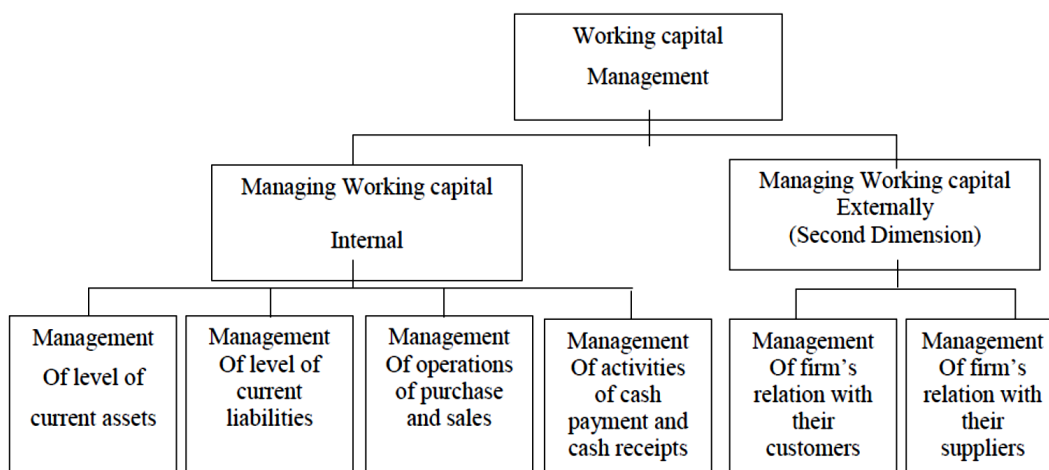
Credit policy has significant impact on the profitability of a concern but it should be ensured that the profit on additional sales arising out of liberal credit policy is sufficiently higher than the cost involved for maintaining additional receivables.

3. Accounts Payable Management

Payable is a form of supplier financing that allows for the purchase of immediate inputs and delayed payment (Hill, D., Kelly, & Lockhart, 2012). Payables or creditors are one of the important components of working capital. Payables provide a spontaneous source of financing of working capital. Payable management is very closely related with the cash management. An efficient account payable policy requires firms to defer payments of payables, which will enable firms to use those capitals to finance investment in current assets. The creditor deferred period (CDP) is the length of time firms are able to defer payments in various resource or supplies purchased (Pandey, 2010). Effective payable management leads to steady supply of materials to a firm as well as enhances its reputation. It is generally considered as a relatively cheap source of finance as suppliers rarely charge any interest on the amount owed. However, trade creditors will have a cost as a result of loss of enjoying cash discount on cash purchases.

Dimensional Approach of Working Capital Management

Fig 1.2: (Baig, 2009)



The choice of a working capital management practices can be viewed in two dimensional perspectives which take a look at the internal and external perspective, Baig (2009),. The internal perspective deals with the management of investment in relation to current assets and short-term financing in addition to operational functions that interferes with the balance of current assets and liabilities Baig (2009). This ensures the maximization of benefits and minimizing of the working capital assets cost with short term financing. The external management on the other hand deals with firm's supplier and corporation with customers This in a bid to minimize cost related to firms inter relations transactions, in an effort a synergy is created on firm value, by taking care of external generated problems Baig (2009).

The Concept of Cooperative Performance

Performance is the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost and speed. Measure can be defined as finding the size or quantity of something in standard units. In mathematical analysis, a measure on a set is a systematic way to assign a number to each suitable subset of that set.

Performance measurement is a tool to improve the cooperatives efficiency and effectiveness. Generally speaking cooperative have difficulty at staying clearly focused on their primary aim and at evaluating performance due to multiple and at times conflicting objectives.

However there are many ways to measure a cooperative's performance these examples of customized measurement help illustrate how the indicators and their measurements should evolve into more complex systems. Mellor (2009) Measures of cooperative performance are divided into three broad categories:

1. Financial profitability and performance;
2. Financial stability; and
3. Financial management.

1. Financial Profitability and Performance

For a cooperative, measuring business success is more complicated than for an investor-owned business. For the latter, the objective is to maximize profit or rate of return on equity. For cooperatives, the objective simply may be to give members a better price or service.

Three measures are used to determine profitability and performance:

- Gross sales or other measure of the size of the business, e.g. gross revenues, such as billings, loans, premiums;
- Gross expenses (the difference between sales and expenses is calculated as a measure of profit); and
- Total administrative/operating cost (calculated as a percent of sales and as change over time.)

For each of these measures, the data are collected for the past 10 years or the life of the cooperative, whichever is longer, in order to examine change over time.

Inflation must also be taken into consideration. Accounting for inflation leaves an approximation of real change over time.

These data measure the size of the business. The resulting figure can be stated per member to see if the business is significant to the member. The data collected over time helps determine whether the cooperative is growing. (Mellor, 2009).

Gross Sales and Related Measures

For cooperatives as a whole, growth is a prime indicator of success. However for the individual cooperative, that is less certain to be true. Growth can be used to reduce the burden of fixed administrative costs, but once administrative costs as a percentage of total business have stopped declining, then further growth may not be an important objective.

For example, housing cooperatives may be only the units in a building, and growth is not an issue unless the building is small and administrative costs need to be spread over more than one building. At the other end of the spectrum, an agricultural marketing cooperative may garner substantial advantages from growth, not only spreading fixed overheads but also achieving economies of scale from greater volumes, access to larger markets, and the ability to take on other functions or services.

Consequently, the growth rate of a cooperative is important to examine for some and not for others. Of course, declining size is generally a problem because the fixed administrative costs do not decrease as size decreases. As a result, the cooperative's efficiency tends to decline. Calculations to be made are growth rate of sales; sales per member; and sales growth rate per member. (Mellor, 2009).

Gross Expenses

Gross expenses are subtracted from gross sales as an indicator of profitability. That number can be deflated by change in prices to put it in real terms and related to sales as a percent of sales. Cooperatives may choose to reduce prices to their members as their efficiency increases, rather than increasing profits as an investor owned firm might. However, a measure of profitability (revenues, minus sales) is still important. Of course, steady losses are not consistent with long-term survival of the cooperative. If profits are low relative to fluctuations in profit, modest fluctuations in volume or prices may eliminate any profit and move the cooperative to losses that cannot be sustained. Above this margin of safety, a cooperative may consider improving prices to their members, increase reserves or membership dividends.

Calculations to be made are expenses as a percent of sales and as change over time; profit, calculated as the difference between sales and expenses; and, growth rate of profit (Mellor, 2009).

Administrative Costs

Administrative costs also need to be measured. This is an area for cost inflation due to lax, incompetent or bureaucratic management. Changes should be measured over time and the costs should be related to sales. Administrative costs that are large relative to sales suggest areas for increasing efficiency. Can those costs be reduced? With growth, it is normal for administrative costs as a percent of sales to decline. Is this happening? If not, why? If the government bureaucracy is running the cooperative, normal government practices may increase costs and provide scope for reduction. Member involvement, especially as volunteers, can reduce administrative costs. They also may serve a vital “watchdog” role, bringing attention to lax management. And they can take on some administrative tasks resulting in savings to the cooperative. All are major advantages of an active membership. However, reducing administrative costs is not an appropriate end in itself. (Mellor, 2009).

There may be an opportunity to increase sales and reduce operating costs by spending more on administration. Low administrative costs also may indicate that management is being underpaid and that efficiency could be increased with higher-quality management. One aspect of good cooperative management is recognizing the importance of the manager, the technical and business skills required and arriving at an appropriate pay scale. The fact that a good manager may require a salary considerably higher than the income of the typical member often is a source of concern, underpayment and poor performance. An apex organization can be consulted on pay issues. The simple statistics used here can be helpful in examining administrative costs. Answers will differ from one cooperative to another.

Calculations to be made are administrative cost as a percent of sales; and change over time in that ratio (Mellor, 2009).

Financial Stability

Is the cooperative financially stable? This requires different data than that for determining if a cooperative is profitable. One is a question for the profit and loss statement. The other is a balance-sheet question.

To succeed over the long term, a cooperative not only must be profitable and efficient, but also have staying power, particularly to get through hard times. . (Mellor, 2009).

Assets

One key measure of cooperative health is growth of total assets the physical and financial building blocks of the business. Generally, it is desirable for capital to be used efficiently so that sales per unit of capital grow over time. With data on asset growth, additional questions can be asked about the growth of components.

Calculations to be made are sales as a percent of assets; growth in assets; assets per member; and growth in assets per member.

Debt and Equity

Debt subtracted from assets equals equity — the ownership capital of the members. Equity should be growing over time as a primary means of ensuring the cooperative's sustainability. Declining equity per member can be a worrisome sign. While it may happen, especially if national or foreign governments are subsidizing the cooperative, it generally bodes ill for the long-term. How equity is calculated varies with different types of cooperatives. For example, electric cooperatives should balance equity with debt because high-cost distribution assets purchased today will last up to 50 years. So the cost should be spread over time to current as well as future consumers. Calculations to be made are growth in equity (assets, minus debt); and equity per member.

Reserves

Negative events may occur, depressing a cooperative's profit and equity and requiring it to draw upon reserves until better times return. Reserves should be compared to the amount of debt (as a percent) and to sales (as sales per unit of debt). Reserves also need to be compared to specific sources of loss, such as;

- Bad debt (unpaid bills);
- Anticipated losses, as in the case of insurance; and
- Projected capital expenditures needed to maintain the asset, as in housing.

For the long-term success of most cooperatives, reserves in total, and as a percentage of sales, should be growing, constantly increasing the safety of the investment.

Measurement and management of risk is often a complex matter, requiring outside professional expertise. At the very least, the board needs to have a sense of the business' risks, how large and how likely they are. From this, they can take prudent steps to protect the cooperative by building reserves. Government involvement that gives the impression of insulation against risks is deleterious to the long-term development and viability of the cooperative.

Calculations to be made are growth in reserves; and reserves as a percent of assets (Mellor, 2009).

Financial Management

All too often, individual cooperatives fail because of misfeasance by the board, manager or members. It is essential to put these sound financial management practices in place:

- Dedicated bank account for all funds, and monitoring of that account;
- Outside auditors to review the finances once a year;

Effect of Cash Position on Cooperative Performance

- Cash management is an overriding consideration in understanding cooperative businesses. Too often, businesses fail before they have a chance to succeed because they run out of cash. Research statistical analysis indicated that the most crucial cause of business failure is due to the lack of planning. The

second leading cause next to poor planning is the lack of adequate cash (McMahon 2006:15).

- Pandey (2010) asserted that Cash management is concerned with managing of Cash flows in and out of the firm, Cash flows within the firm, and Cash balances held by the firm at a point in time by financing deficit or investing surplus cash. He further stated that objectives of cash management include maintaining adequate control over cash position, keeping the firm sufficiently liquid and to ensuring usage of excess cash in profitable ways. Cash management is a main area of working capital management. Other parts of it are inventory management, credit management and management of short-term liabilities. Cash management covers the management of the company's cash in the normal course of business i.e. making sure the company always have enough cash on hand to meet its bills and expenses, and investing any surplus cash (CIMA, 2002).

Relationship between Account Receivables, Account Payable and Cooperative Performance

Accounts receivables of a business Organization are created in two major ways. On one hand, the firm may advance payments to the suppliers of inventories to ensure timely supply, especially when the supplier hold a monopolistic position or when materials are in short supply or a firm desiring to develop a captive supply base or for short term financial and profitability considerations. On the other hand accounts receivables are created by a firm selling its output on credit, popularly termed as sundry debtors. Trade credit influences preferences of both sellers and the customers. The functions of accounts receivables management are intended to set out credit terms, selection of credit worth customers, installing an appropriate collection and monitoring system and financing the receivables for maximizing the firm's value (Bhattacharya, 2006).

According to Preve and Sarria-Allende (2010) firms invest in financing clients when their core business is not related to lending money or providing financial services because of various reasons. These reasons include, gaining competitive advantage, redistribution where firms with greater access to financing redistribute the available capital to clients facing credit constraints, information asymmetry where suppliers with close customer relationships have an advantage over financial creditors in obtaining information about their customer's credit worthiness, as they are able to observe customers' orders, and payments, among others. This information advantage lowers supplier's credit risk and in turn increases their willingness to finance customers. In addition, suppliers often offer credit because they want to maintain long-term business relationships with their clients.

According to Kontus, (2013) accounts receivable management includes establishing a credit and collection policy. The policy includes, credit period, discounts for early

payment, and credit standards specifying to whom credit should be extended, the terms of the credit and the procedure that should be used to collect the money. Lower accounts receivable ratios may indicate that average investment in accounts receivable is unsuitable and the company's credit policy is too stringent. This may lead to loss of business with the company failing to tap into the potential for profit through sales to customers in higher risk classes. Investment in accounts receivable represents the cost of capital tied up in those receivables. Therefore, a company has to weigh the profit potential against the risk inherent in selling to more marginal customers. The profitability on additional sales generated must be compared with the amount of additional bad debts expected, higher investment and collection costs, along with the opportunity cost of tying up funds in receivables for a longer period of time.

According to Pandey and Jaiswal (2011) accounts receivable conversion period is the average time taken to convert debtors into cash, represented by the average collection period. It is calculated by dividing the product of accounts receivable figure and 365 days by credit sales.

When establishing a credit policy, finance managers must consider three main variables; credit standards and analysis, credit terms, and collection policy and procedures (Pandey, 2007). Credit standards are the criteria to be followed in selecting customers worthy of credit extension. The three Cs, Character of customer, Capacity to pay and prevailing economic Condition are important considerations. Credit terms stipulate conditions under which the firm sells on credit to customers. They specify the credit limit, credit period and the cash discount. Lastly firms should follow a well-documented collection policy and procedure to collect dues from customers. If the credit period is over and the customer has not yet paid, for example, the firm can send a polite letter reminding the customer, the firm sends progressively strong-worded letters followed with telephone reminders if the customer intentionally fails to pay or may proceed with court action. Trade credit is an important source of finance for firms. Investment in accounts receivables is an important part of a firm's balance sheet. Trade credit granted by firms to customers can have important implications for firm's value and profitability. Suppliers extend credit mainly to enhance sales and consequently may result in higher profits, mitigate customer's financial frictions; trade credit enables price discrimination, by varying the period of credit or the discount for prompt payment. In the long run trade credit might give future profits by establishing and maintaining permanent customer relationships (Martinez-Sola, Banos C., Gracia T., 2014).

Many companies are too passive when it comes to collecting overdue invoices. The money customers owe the company plays a big role in the monthly cash flow, therefore it is important to develop a solid technique for tracking who owes the firm money, how much they owe and when the payment is due. Accounts receivable staff must take a proactive approach to collecting unpaid bills. Periodic reports showing the total amount outstanding, along with an explanation of why those payments have

not been received is recommended. Building an accounts receivable database is one of the best ways to keep track of what the company is owed (Damodaran, 2012).

Accounts payable arise when firms purchase goods and services or supplies on credit. Accounts payable is the largest single category of operating current liabilities. It arises from ordinary business transactions. An efficient account payable policy requires firms to defer payments of payables, which will enable firms to use those capitals to finance investment in current assets. The creditor deferred period (CDP) is the length of time firms are able to defer payments in various resource or supplies purchased (Pandey, 2010). Most firms that sell on credit have credit policy that includes the terms of credit. A firm may indicate that; goods sold on credit, if payment is made within ten days, the customer benefits from a 2% discount; otherwise pay the full amount within thirty days. A good and efficient account payable policy must consider and analyze credit terms before engaging in the creation of account payable. Credit terms that are flexible and beneficial to the firm should be considered (Pandey, 2010).

If you have a set of best practices in accounts payable management and you follow them, accounts payable can have quite a positive impact on your company's profitability. First, the company has to pay its bills on time. A simple best practice, but nothing else will work if you do not do this.

Second, if you pay your bills on time, you can elicit trust between you and your suppliers, regardless of how many suppliers you have. If you have trust, your suppliers will try to help you in a number of ways discussed above, including offering you discounts which will positively impact your profitability in a big way.

Third, a best practice is to try to facilitate processing of your accounts payable with a minimum of staff and paperwork. You do not need several accounts payable clerks. Smooth out your accounts payable management, and you will increase your profitability by decreasing personnel and time spent on paperwork. (Peavler, 2018). When there is too much going out through AP, and not enough coming into AR to balance it out, the business will run into negative cash flow issues. Staying on top of both departments ensures that the business will be able to handle financial issues as they arise.

Theoretical Framework

This research is anchored on two major theories, namely: risk-return trade off theory.

Risk and Return Theory

The risk and return theory by Harry (1952) is one of the most important theories in the field of portfolio management. The risk and return relationship has received considerable attention from researchers in business, economics and finance (Mukherji, Desai & Wright, 2008). Furthermore, every decision with respect to investment is based on risk and return relationship (Richard, Stewart & Franklin, 2008). Relating to that, two conflicting attitudes are always associated with the risk.

That is, the risk-seeking behavior and the risk aversion. Risk seekers always prefer choices involving a higher potential loss or a greater probability of a loss and of course with a strong notion of over estimating gains. The main focus of risk-seekers is on the opportunities for gain.

Conversely, risk-averters are completely opposite of risk seekers, in the sense that they (risk averters) over estimate losses and underestimate gains. However, in order to integrate the risk and return theory in working capital management, it is imperative to stress that one of the cardinal decisions in working capital management is the trade-off between liquidity and profitability. If a firm chooses to be liquid, it should be at the expense of the profit and vice-versa.

Any of these two conflicting decisions may result in either of excess or shortage of the components of working capital and the current assets of a business. In the same vein, the risk and return theory which is an integral part of the portfolio theory can be associated to working capital when we look inwardly at the ability of a firm or financial manager to determine the collection of assets, or portfolio to be acquired, since it is impossible to own everything, decisions on what the composition of receivables, inventories, incentives and stocks viz-a-viz the profitability concern are all within the context of risk and return theory.

Zariyawati, Annuar, Taufiq and Abdulrahim, (2009) theory of risk and return states that investment with a higher risk may create a higher return, thus a firm with a high liquidity in working capital will have a low risk of failing to meet its obligations, and low profitability at the same time. That is, the greater the amount of NWC, the less risk-prone the firm is and the greater the NWC, the more liquid is the firm therefore, the less likely it is to become technically insolvent. Conversely, lower of NWC and liquidity are associated with increasing levels of risk. The relationship between liquidity, NWC and risk is such that if either NWC or liquidity increases, the firm's risk decreases (Zariyawati et al, 2009).

Methodology

Research Design

The research design adopted for this study is the survey research design.

Sources of Data

Two major sources of data were referred to in the course of this study, the conventional sources of primary and secondary data. Data for this study was collected mainly from primary source. Data were gathered from the primary source through questionnaire that was self-administered while secondary source of information were journals, textbooks and other records that are relevant to the study.

Area of the Study

The area of study is Imo State.

Population of the Study

The population of the study consists of all registered and active credit and thrift cooperative societies in Owerri, Imo State. From the data gotten from the State Ministry of Cooperative (2018) report, there are a total of 1184 registered credit and thrift cooperative societies that are active and functional with membership strength of 38,520.

Sample Size Determination and Sampling Technique

Multistage sampling technique was used in this study. All agricultural cooperatives in the area were categorized into the three agricultural zones in the state. In stage one, the local government areas that are predominantly agrarian where these agricultural cooperatives were based was purposively selected from each of the three agricultural zones: Owerri zone, Orlu zone and Okigwe zone. In stage two, all the registered cooperatives in these selected agrarian local governments were selected. In stage three, all the cooperatives who have audited accounts for 2016 and 2017 were selected.

To determine the sample size for the study, Taro Yamani formula was used

$$n = \frac{N}{1 + N(e)^2}$$

Where n = Sample size

N = Desired sample size

1 = Constant

e = The degree of error expected

N = 213

e = 0.05

Therefore,

$$n = \frac{213}{1 + 213(0.05)^2}$$

$$n = \frac{213}{1 + 213 \times 0.0025}$$

$$n = \frac{213}{1.5325}$$

n = 139

Table 1: Showing Agricultural Zones, Number of Cooperatives and members Selected.

Zones	No of registered cooperatives	No. Of Agricultural Cooperatives with audited account	No of cooperatives studied
Owerri			
Ikeduru	148	24	16
Ezinihite	130	21	12
NgorOkpala	167	25	14
Okigwe			
Obowo	171	29	17
Onuimo	128	21	14
Iheme	92	21	15
Orlu			
Njaba	109	26	18
Nkwere	79	24	17
Oru West	133	22	16
Total		213	139

Source: Researcher Survey, (2022)

Sources of Data

Primary and secondary data were employed in this study. Primary data was generated from the questionnaire which is based on the research questions for the study on the working capital management and performance of cooperative societies while secondary data was retrieved from the annual reports of the various corporative societies under study.

Instrument for Data Collection

The instrument for data collection is the structured questionnaire designed by the researcher in line with the objectives of the study. As a result, the questionnaire was designed to be filled by executive member of these cooperative in order to generate the missing data. A total of 139 copies of questionnaires was prepared and distributed, one for each cooperative studied. Out of the 139 copies of questionnaire distributed, only 120 were effectively filled and returned, giving a return rate of 86%.

Reliability of the Research Instrument

Reliability test to check the consistency of the measuring instrument over time was conducted in a test-retest manner, using Pearson Correlation coefficient. Under this procedure the instrument administered to a sample of 12 executive members of the selected cooperatives in the area of study. Their responses were noted and appropriately coded. Thereafter the same instrument was administered to the same group of farmers after 3 weeks and their first and second responses were examined using Pearson Correlation Analysis. The result showed a test result of 0.790 affirming that the instrument is reliable.

Method and tools for Data Analysis

Descriptive statistics such as frequency distribution, means and percentages was used to analyze the data obtained to address the objectives of the study. Also inferential statistics, such as one sample t-test and regression was employed to address the research questions and to test the promulgated hypotheses. Specifically, mean rating and descriptive statistics were used to address the research questions while f-test, t-test was used to test the hypotheses at 5% level of significance.

Objective number one was achieved using one sample t-test.

Objective number two was achieved using regression analysis

The Statistical Package for Social Sciences (SPSS) version 22 was the software employed in the analysis of the data generated.

Model Specification

The relationship between the dependent and independent variable were measured by a linear regression expressed as: $y=a+bx$ 1

The relationship between the dependent variable (Return on investment which is a measure of performance) and independent variables (netcashflow, stock level, turnover ratio and invoice lead time) which are components of working capital is stated thus:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \epsilon \dots\dots\dots 2$$

Where y = Cooperative performance (proxied by return on investment)

a = constant term

x_1 = cash and bank proxied by net cash flow

x_2 = inventory level proxied by stock level

x_3 = account receivable proxied by turnover ratio

x_4 = account payable proxied by invoice lead time

Therefore,

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \epsilon \dots\dots\dots 3$$

Where: Y = return on investment

a = constant term

β_1, β_4 = parameter of estimate

x_1 = net cash flow

x_2 =stock level

x_3 =turnover ratio

x_4 = Invoice lead time

e = error term

Linear:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + e \dots\dots\dots \text{Equation 2}$$

DATA PRESENTATION AND ANALYSIS

Extent account receivable influence cooperative performance

Effect	SA	A	N	D	SD	Mean	Remark
Affect cooperative liquidity	18	29	11	53	9	2.95	Reject
Affect cooperative profitability	33	41	13	26	7	3.56	Accept
Affect goodwill and reputation	12	32	27	32	17	2.92	Reject
Affect size of dividend and welfare package	39	47	18	10	6	3.86	Accept
Affect capital base of the cooperative	26	36	7	40	11	3.22	Accept

Source: Field survey, 2022

The Table above revealed that account receivable had significant influence on cooperative performance. Out of the five variables that were measured, four were significant. These variables were cooperative profitability, reputation/goodwill, welfare package, dividend payout and capital base of the cooperative. However, account receivable did not have significant effect on cooperative liquidity.

Effects of account payable on cooperative performance

Effects of account payable	SA	A	N	D	SD	Mean	Remark
Ensures delivery of orders	29	43	17	20	11	3.50	Accept
Enhances invoice financing	17	29	22	31	21	2.92	Reject
Leads to positive net cash flow	15	31	28	38	8	3.06	Accept
Increases credit worthiness	31	47	19	16	7	3.66	Accept
Brings about sustainable stakeholder relations	36	42	21	21	0	3.78	Accept
Increases inventory size	29	49	15	14	13	3.56	Accept

Source: Field survey, 2022.

The table analyzed the effect of account payable on cooperative performance. Findings revealed that account payable had significant effect on delivery of order, contribute to positive net cash flow, increases credit worthiness of cooperatives, increases inventory sizes and brings about sustainable stakeholder relations. Only one variable was rejected as being insignificant. Based on these findings, the researcher concluded that accounts payable had significant effect on cooperative performance.

Hypothesis One

H₀₁: Accounts Receivables does not have significant influence on cooperative Return on Investment (ROI) in Imo State.

Decision:

From the output above the significant value was 0.263 which is higher than the alpha value 0.05 based on the above we do not have enough evidence to reject the null hypothesis we therefore conclude that Account receivables does not have significant

influence on cooperative Return on Investment (ROI) in Imo State, based on the responses extracted from the respondents.

Hypothesis Two

H₀₂: Accounts payable does not have significant influence on cooperative members Return on Investment (ROI) In Imo State.

Decision

According to the output, account payable was found to be significant at 0.05 level of significant. The null hypothesis was therefore rejected. So we conclude that account payable had significant influence on cooperative performance.

Discussion of Findings

Analysis on hypothesis one on extent account receivable influence cooperative performance shows that account receivables affect cooperative profitability and size of dividend and welfare package. However it was found that account receivables do not affect cooperative liquidity, goodwill and reputation and capital base of the cooperative.

Analysis on hypothesis two showed that account payable on cooperative performance ensures delivery of orders, increases credit worthiness, brings about sustainable stakeholder relations and Increases inventory size. However account payable on cooperative performance does not enhance invoice financing and does not lead to positive net cash flow.

Summary of Findings

It was revealed that account receivables affect cooperative profitability and size of dividend and welfare package. However it was found that account receivables do not affect cooperative liquidity, goodwill and reputation and capital base of the cooperative. Accounts payable on cooperative performance ensures delivery of orders, increases credit worthiness, brings about sustainable stakeholder relations and increases inventory size. However account payable on cooperative performance does not enhance invoice financing and does not lead to positive net cash flow.

Conclusion

The study established that effective working capital performance provides a critical insight into the state of the cooperatives financial position. It is a crucial indicator of financial fitness. It was noted that the cooperatives ability to properly manage current asset and the association liabilities or current obligations may determine how well it is able to survive in the short run. Specifically, the findings of the study indicate that account receivables affect cooperative profitability and size of dividend and welfare package and that account payable has a significant influence on cooperative performance.

From the result of our analysis, we can conclusively say that working capital management has a significant influence on agricultural cooperative performance in Imo state Nigeria.

Recommendations

Based on the analysis and findings of this study, the researcher therefore recommends that:

- i. Cooperative societies need to have working capital management policies that will help them to remain profitable. This can be achieved by observing the duration of their account receivable days which should be shorter. Account payable days which should be longer and optimum debt ratio
- ii. The influence of working capital management on agricultural cooperative performance cannot be effective because the cooperative depends on the manner in which those in charge manage the working capital, thus, Proper training need to be organized by the cooperatives to ensure that the executives are well trained to execute working capital management practices which will in turn lead to improvement in the profitability of operation, managerial efficiency, minimize financial risk and ensures liquidity.

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DETERMINANT OF SAVING AND INVESTMENT BEHAVIOR OF SMALL SCALE POULTRY FARMERS IN UMUAHIA AGRICULTURAL ZONE OF ABIA STATE

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Abstract

The study investigated the determinant of saving and investment pattern among small-holder poultry farmers in Umuahia agricultural zone of Abia state. The poultry farmers save little amount, so they do not have enough for their investments. The specific objectives were to: describe the socio-economic attributes of smallholder poultry farmers; identify the prevailing investment patterns among the poultry farmers; estimate the determinants of savings volume of smallholder poultry farmers and identify the major challenges facing the poultry farmers in accumulating savings and expanding investment in the study area. Multistage sampling technique was used to select well structure questionnaire. Descriptive and multiple regression analysis were used to analyze the data collected. Ten 10 farmers were randomly selected from the ten villages making it 100 poultry farmers. Results of analysis showed that majority of the respondents were married with a moderate household. Majority of them were literate. Results also show that most preferred savings outlets of small holder farmers were the informal savings outlets mainly the self-help groups. It was evident from the research that there were the propensities to save among farmers in the study area, inspite of low income. There were factors that have positive influence on savings behaviour of small holder poultry farmers surveyed, such as level of income, household size, education, age and access to credit. Meanwhile, the OLS results of the estimated determinants of investment pattern with double-log functional form as the lead equation showed that age, flock size, farm income and expenditure influenced the inability to save. The study, therefore, recommended that given the significance of the income factor in terms of savings, incentives such as improved technology, appropriate farm support services; medium and long term loans should be provided by the government and other bodies to farmers in order to boost their income level. Only then can the savings being accumulated in the next economy be transformed into productive investment.

Introduction

The Nigerian Agricultural Economy delighted in decade of boom in poultry production between mid-70's and mid 80's. For instance, the population of cattle (174.3 million), goat (156.6 million) and sheep (190.31 million) while that of poultry was evaluated to be 660 million against other animal populace in 1983 (FAO, 2012). It reported that the poultry industry has turned into a diverse business with an

assortment of business interest, for example egg production, broiler production, hatchery and poultry hardware business. This significance of animal protein remains undisputed: animal protein supply man with high quality nourishment with aid growth development and tissue replacement. It decides the level of nourishment of the populace and the health of the labor forces, which thusly decides the advancement of a county and its economy.

Agriculture in Nigeria is practiced at a subsistence level and is characterized by numerous farmers operating several scattered small-scale and fragmented plot of lands, using traditional methods such as land rotation, bush burning and crude implements (Odoemenem et al, 2013). According to Olawapo (2010), majority of the rural populace in Nigeria either depend entirely on farming and farming activities for survival and generation of income, or depend on other non-farming activities to supplement their main sources of income.

Olawapo (2010) posited that, over 90% of the country's of the local food production comes from the small-scale farmers, about 60% of the population earn living from these small-scale farms which usually of the size about 0.10-5.99 hectares (Olawapo, 2010). It could then be seen that most farmers have limited resources, a factor that limits their production, investment, savings and income. Agriculture plays an important role in employment and revenues generation as well as in the provision of raw materials for industrial development. However, the nation's agricultural potential are far from being fully realized and this has serious implications for food security, and sustainable economic development, the underdeveloped of the agriculture is indeed worrisome, given the fact that the country is naturally agriculturally well endowed.

Statement of the Problem

One of the basic problems confronting the development of agricultural sector in Nigeria could be attributed to inadequate savings and investment by the small-scale farmers. Agriculture in Nigeria like in most developing countries is predominated by small farm producer, and several constraints and barrier which appears insurmountable, limit the overall farming activities. Low savings capacity of farm families is one of the predominant factors responsible for stagnation of agricultural sector in Nigeria Despite this problem policy makers have not really drawn up an adequate and comprehensive rural savings scheme that will ginger the farmers to use their capital productively (Odoemenem et at, 2013).

Savings is indispensable to economic development by virtue of its relationship with investment (Akubuilu, Umehali and Mgbada, 2005). According to Odoemenam et al, (2013), economic theory indicates a one to one correspondence between savings and investment so that the size distribution of savings indicates investment potentials and possibilities. If investment remain localized in accordance to size of savings generated in a specific area, there are likely to be more investments in the areas of much saving

than in those of meager savings. Savings according to Igben and Akande (1988), is preferred more in the financial form which makes funds readily available to investor and other needing money to expand their business operations. It has been shown that savers in developing countries, particularly in rural areas, prefer to save their money in terms of physical and tangible assets, such as land, building and livestock. This practice leads to scarcity of monetary savings for investment purposes. Savings as a determinant of economic growth and economic development was emphasized by classical economists.

However, there has been no consensus on factors which naturally affecting the proportion of income that is saved. Several variables have been indicated as influencing saving and these include current income, permanent income, wealth, interest rates, the price level, demographic characteristics and a host of other variables (Odoemenam et al, 2013). The market forces such as supply and demand affect savings and investments.

This study therefore is designed to provide answers to the following research questions:

1. What are the socio-economic characteristics of small-holder broiler farmers in the study area?
2. What are the various patterns of savings and investment pattern of small-holder broiler farmers in the study area?
3. What are the factors influencing savings and investment pattern of small-holder broiler farmers in the study area.
4. What are the constraints to savings and investment of smallholder broiler farmers in the study area?

Objectives of the study

The broad objective of the study is to determine the saving and investment behavior of small-scale farmers in Umuahia Agricultural zone of Abia State.

However, the specific objectives are to:

1. describe the socioeconomic characteristics of small-holder arable crop farmers in the study area;
2. examine the various savings and investment patterns of small-holder arable crop farmers in the study area;
3. determine the factor influencing savings and investment of small-holder arable crop farmers in the study area;
4. identify the constraints associated with savings and investment in the study area.

Hypothesis

The null hypotheses (H₀) tested were:

- i. There is no significant relationship between savings and investment and small-scale broiler farmers in Umuahia Agricultural zone of Abia state.

- ii. There is no significant relationship between the socio-economic characteristics of small-scale farmers and their savings and investment in Umuahia Agricultural zone of Abia state.

Literature review

Savings

Savings may be made in kind such as jewelry, land or livestock. It may be in the form of currency notes deposited in banks or more often hoarded. Savings provide several benefits for farm households. The sustenance of household savings increases the possibility of future investment both at the micro and macro-levels in the economy. Directly, savings could be used for investment. Indirectly, savings indicated repayment ability, also increase credit rating and as collateral in a credit market (Brata, 1999). Savings is both a risk management strategy and determinant of magnitude of investment. Investment are being made in agriculture to improve the quality of rural assets and enhance productivity. The ability, willingness and opportunity of households to save and invest over time can therefore significantly influence the rate and sustainability of capital accumulation and economic growth in developing countries (Oluwakeme, 2012).

Savings is in economics normally considered as disposable income minus personal consumption expenditure. It can also be regarded as income that is not consumed immediately by buying goods and services. Income in this concept includes all the earnings from all sources during a year (Nwibo, 2013).

According to Anyanwu and Oaikhenan (1995), saving is defined as the amount of income disposable income not spent on domestic products or consumption of imported goods and services. For the firm, it represents undistributed business profits, according to Jhingan (2004), savings is termed as the difference between disposable income and consumption that is, $S=Y-C$, where S is savings. Y is income C is consumption. Savings can be referred to as that portion of disposable income that is not devoted to current consumption.

Investment

Jhingan, (2004) from economics perspective, defined investment as production or acquisition of real capital assets during any period of time. Keynes (1936), investment refers to real investment which adds to capital and equipments. It leads to increase in the level of income and production by increasing the production and purchase of capital goods. Investment thus, includes new plants and equipment, construction of public works like dams, roads, building, net foreign investment, inventories, stocks and shares of new companies. According of Anauanwu (1995) defines investment along the lines of gross private domestic investment or gross fixed capital formation. The national income accounts defines gross fix capital forming (GFCF) as consisting of all capital expenditure on buildings (residential and non-residential), land improvement, transport equipment, breeding stock or machinery and equipment.

Over the years, many farmers in Nigeria have increasingly not been able to invest adequately on their farming activities. They have as such resulted to forming cooperative movements to achieve a common goal through democratically controlled business organization. The most important economic obligation of members of the cooperative society is savings. Farmers save specific amount of money daily, weekly, monthly or quarterly as it is convenient for the group and the individuals. This type of savings is important for agricultural production, because it allows farmers of members' access to credit at the onset of the farming season which could boost farm production and income of the farmers. Odoemenem et al., (2013) were of the view that small scale farmers invest their savings in two major areas. These are the agricultural and non agricultural sectors, investment in the agricultural sector or farm activity includes the purchase of fertilizer and chemicals, hired labour and buying more land for farming. While investment in non agricultural sector are mainly centred on education, trade expansion, building houses, dowry obligation and purchases of durable assets.

Relationship between Savings, Income and Investment

The concept of savings, income and investment are intertwined. They all complement each other, a household with high ability to save has the potential of earning more income of the savings are productively invested, *Ceteris paribus*, the household with high income-earnings capacity has the potential of making substantial savings.

Research Methodology

Study area

The study was carried out in Umuahia agricultural zone of Abia State. Umuahia agricultural zone of Abia State. Umuahia agricultural zone is located in Abia State, South east of Nigeria. The zone is between longitudes 7° 23' and 8° 02' East of Greenwich meridian and latitudes 5° 49' and 6° 92' north of the Equator. The population of the zone is 1,913,917 (NPC 2006). The zone is made up of five local government areas namely; Isiala Ngwa North, Isiala Ngwa South, Umuahia North, Umuahia South, and Ikwuano. There has been dense equatorial vegetation characterized by thick forest, the soil is subjected to erosion and leaching with annual temperature of between 20°C-30°C and rainfall ranging from 200mm-300mm (Opara, 2004).

There are two distinct seasons; rainy season which starts in March and ends in October while dry season starts in November and ends in March. The major food and cash crops produced in the area includes cassava, maize, melon, banana, oil palm, orange, mango, cowpeas. The animals reared at both subsistence and commercial levels are goats, sheep, pig, poultry and sometimes cow. The farmers of the zone also engage in other off-farm and non-farm activities like trading, civil service, welding, saloon business, baking and transport business among others.

Sampling Technique

A multi-stage random sampling technique was employed for this study

In stage one, three local Government areas namely: Umuahia South and Umuahia Local Government Areas were purposively selected due to intensity of poultry production in the areas.

In the second state, 1 autonomous community was randomly selected from the selected Local Government Areas to make it 2 autonomous communities

In the third state, 5 villages were selected from each autonomous community making it 10 villages

In the fourth stage, 10 broiler farmers were randomly selected from the selected villages making it a total of 100 poultry farmers.

Method of Data collection

The study made use of primary data, data were collected for the purpose of this study by use of standard and structured questionnaires personally administered on the small holder arable crop farmers. The data of interest includes personal and household characteristics, household income and savings amount; information will also be collected from secondary sources such as textbooks, journal, learned publication, bulletins and the internet on existing work of previous researchers for empirical studies.

Method of data Analysis

Different statistical tools were used in data analysis. Descriptive statistics such as frequencies, means, table, pie chart, bar chart, histogram and percentages were used to obtain the socioeconomic characteristics of the small holder poultry farmers (objective i), examine various savings and investment patters of small holder poultry farmers (objective ii), and constraints that militate against savings and investment of small holder farmers (objective iv). However, multiple regression model was used to estimate the factors influencing savings and investment of smallholder poultry farmers (objective iii).

Model Specification

The multiple regression model of the determinants of poultry farmer's savings and investment is explicitly stated as follows:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + e_i \dots \dots \dots (3.1)$$

For savings model:

Where;

Y= Amount Saved (Naira)

X₂= Education level (number of years spent in school)

X₃= Primary occupation (farming =1, 0= otherwise)

X₄= Flock size (No. of birds)

X₆= Farming experience (years)

X₇= Membership of farmers association (Yes=1, No=0)

X₈= Access to credit (Naira)
 X₉= Disposable income/Expenditure patterns (Naira) ei
 Error terms b₀= Intercept, b₁-b₉ = Regression
 Parameters to be estimated.

Investment model:

Where;

- Y = Amount Invested by the respondent in farm production (Naira)
- X₁ = Age of the respondents (years)
- X₂ = Household size (number)
- X₃ = Education level (number of years spent in school)
- X₄ = Primary occupation (Farming =1, 0= otherwise)
- X₅ = Flock size (No of birds)
- X₆ = Farming experience (years)
- X₇ = Membership of farmers association (Yes =1, No =0)
- X₈ = Access of credit (Naira)
- X₉ = Savings (Naira)
- X₁₀ = Disposable income/Expenditure patterns (Naira)

Table 4.2 shows that 62% of the farmers were married, while 35% of them were single and 1% of the respondents were widowed and divorced respectively, people were more involved in farming in the Umuahia Agricultural zone of Abia state. Married farmers are usually involved in the regards as they know how best to utilize labour (household) available to them in farming activities. This could haveeffect on income level of the farmers (Simonyan and Onu, 2018). The result after implies majority of the farm households are stable. According to Nwaro (2004). This and entrepreneurship, which were very important for efficient use of resources.

Table 4.3 Distribution of respondents according to age

Age (Years)	Frequency	Percentage (%)
21-30	12	7
31-40	33	38
41-50	42	42
51-60	13	13
Total	100	100
Mean: 42		

Sources: Field Survey, 2021

Table 4.3 shows that 12% of the farmers were within the age of 21-30years whereas And 13% of them were within the age range of 31-40 years, 41-50 years and 51-60 years respectively. Result also shows that the mean age of the farmers was 42 years. This implies that farmers in Umuahia Agricultural zone of Abia state. Whereas

the youthful age, more energetic and flexible to cope with risk and uncertainties that characterize farming. They were also more likely to adopt new improved technologies. As noted by Iheke (2016) and Iheke and (2014), the risk bearing ability and innovativeness of farmer, his mental capacity to cope with the daily challenges and demand of farm production activities and his ability to do manual decrease with advancing age.

The education level of the farmers in Umuahia agricultural zone of Abia State as shown in table 4.5 reveals that 40% of the farmers had secondary school education while 3% of them had no formal education. However, 97% of the women farmers in the study area were literate with divers formal educational levels ranging from primary school education to tertiary education. Literacy (ability to read and write) would enable the women farmers to better utilize effectively and efficiently available resources in the area especially credit avail to them for farm businesses and curtail frivolous spending. Also, possession of literacy (ability to read and write) would enable the farmers to better utilize effectively and efficiently whatever available resources in the area. As expected, higher education would enhance improved technology adoption hence increase farm income (Ezeh and Anyiro, 2012).

The farmers educational level is expected to have a positive influence on the adoption of improved technologies such as farm mechanization, fertilizer usage, agro-chemical, high yielding seeds variety which should have high potentials to increase farm productivity. Higher education would also enhance improved business ideas, skills, innovation and managerial ability to business sustainability, this result is in agreement with Nwibo and Okorie (2013).

Table 4.6 Distribution of respondents according to years of farming experience

Years of farming experience	Frequency	Percentage (%)
1-10	18	18
11-20	46	46
21-30	26	26
31-40	10	10

Mean: 18

Source: Field Survey, 2021

Table 4.6 shows that 18% of the farmers had farming experience of between 1-10 years. Also 46% of the respondents had between 11-20 years of farming experience, while 26% of them had farming experience of between 21-30 years while only 10% of the respondents had farming experience of between 31-40. Result showed that the mean farming experience was 18 years, implying that the farmers were reasonably experienced and this has some positive implication for increased productivity. According to Nwaru et al. (2011) the number of years a farmer has spent in the farming business may give an indication of the practical knowledge he has acquired on how he can overcome certain inherent farm production problems.

Major Methods of Savings By Smallholder Poultry Farmers In The Umuahia Agricultural Zone Of Abia State.

The major savings methods as identified by the smallholder poultry farmers in the Umuahia Agricultural zone of Abia state are presented in Table 4.7

Table 4.7: Major savings Methods by the small holder poultry farmers

Method	Frequency	Percentage
Bank	25	25.0
House	20	20.0
Cooperative thrift	11	11.0
Self-help group	32	32.0
Relative/Friend/Neighbor	10	10.0
Isusu collectors	29	29.0
Rotating savings and credit association (ROSCAs)	16	16.0

Source: field survey, 2021. Multiple responses

Table 4.7 shoes various avenues in which the poultry farmers in the Umuahia Agricultural zone f Abia state made their savings. From the result it was discovered that majority of the farmers made their savings in there self-help group which is the case of most women farmers and accounted for 32.0% of the entire farmers that made savings. Also a good proportion (29.0%) of the respondents saved their money with Isusu collectors. However, 25% of the farmers made their savings in the bank. Meanwhile, 20.0%, 11.0%, 10.0% and 16.0% others made their saving in their respective homes, cooperative thrift and credit society, through Relative/Friend /Neighbor and in Rotating savings and credit association (ROSCAs) respectively. This is a clear indication that majority of the smallholder poultry farmers made their savings in informal financial sector. This is in line with the view of Odoemenem, et al., (2013) that farmers make use of informal financial sector to mobilize savings and develop their rural communities because it gives them access to loans that they cannot get from formal financial institutions due to lack of collateral.

Prevailing Investment Patterns among the Poultry Farmers in the Umuahia Agricultural Zone Of Abia State.

The prevailing patterns of the small holder poultry farmers and the average amount invested is shown in Table 4.8

Table 4.8: Distributions of Respondents on Type of Farm Enterprise and average amount invested

Enterprise	Frequency	Percentage	Average Amount invested
Crop production only	30	30.00	497,098.65
Poultry	20	50.00	654,345.09
Livestock	10	10.00	340,223.15
Fisheries	7	7.00	411,907.34
Others (apiculture, helicultureetc)	3	3.00	299,445.88
Total	100	100	

Source: Field Survey, 2021

The result indicates that 30.00% of the respondents were into arable crop production while 3.00% of the farmers diversified into other enterprises like establishment of other farm enterprises such as: apiculture, heliculture, etc. a fair proportion (50.00%) and 10.00% of the farmers were into poultry and livestock farming respectively. According to the result presented in Table 4.8, the highest average amount invested in poultry production by the farmers was ₦654,345.09. Similarly, ₦497,098.65, ₦340,223.15 and ₦411,907.34 were invested in crop production, livestock farming and fisheries respectively by the poultry farmers while other farm enterprise such as bee keeping, heliculture among others attracted an average investment amount of ₦299,445.88. This means that most of the farmers applied the fund saved in poultry, crop and livestock production because of high productivity and income.

Determinants of Savings of Smallholder Poultry Farmers in Umuahia Agricultural Zone of Abia State

The estimated regression analysis of the determinants of savings among smallholder poultry farmers in the study area are presented in Table 4.9

**Table 4.9 Determinants of savings of smallholder arable crops farmers in Umuahia
Agricultural zone of Abia State**

Variable	Linear	Exponential	Semi-log	Double-Log+
Constant	6.823 (0.549)	1.626214** (3.349)	11.508 (9.6251)**	12.840 (9.0234)***
Age of the household head	-0.013211 (-2.8925521)	0.01 (5.811)**	-0.2306 (-1.31)	-0.7498 (3.0022)**
Farming Experience	2.332 (1.2228)	0.331 (0.960)	-0.03 (-1.40)	2.0111 (1.33)
Educational level	-142.007 (-1.330)	0.0045 (0.103)	0.05 (2.64)**	0.8966 (11.21)***
Household size	3.647805 (3.6021614501)	13340.86 (1.829392)**	0.57 (-3.41)**	-0.8966 (-3.41)
Flock size	0.699 (12.652)	2.88E-006 (4.703)***	0.03 (2.45)**	0.452 (0.32)
Access to credit	0.018676 (0.014296)	-697.626 (-1.1059)	0.024 (0.20)	0.6444 (2.14)**
Membership of cooperative society	-0.61476 (-0.37231)	1.626124 (0.349)	1.23 (1.02)	13.14 (0.12)
Net farm income	6.823 (2.549)**	0.01 (5.811)**	0.44 (2.68)**	0.825 (2.24)**
Occupation	-13900.82 (-0.67)	-38225.05 (-0.73)	0.0155195 (0.07)	-0.4193066 (-0.85)
Expenditure	0.1804892(0.45)	0.3550777(2.24)**	11607.68(0.71)	5.51e-06 (1.00)
R2	0.237	0.421	0.56	0.623
Adjusted R2	0.294	0.342	0.550	0.625
F-ratio	14.509**	21.207**	21.146**	28.328***

Source: Field survey, 2021 (* = 10% level of significance (= 5% level of significance**

The double log model was chosen as lead equation based on the number of significant explanatory variables, the F-ratio, the value of the R² and conformity with a priori expectations. The F-ratio was significant at 1% showing the overall significant of the result. The R² was 0.625 which implies that 62.5% of the variation in the dependent variable (Savings of smallholder household farms) was explained by the independent.

The study also showed that age, educational level, household size, access to credit and net farm income positively influenced savings of the small holder poultry farmers at P≤0.05.

The result shows that the coefficient of age of the household head (-0.7498) and savings are inversely related. This is in line with a prior because the older one becomes the less he saves.

The coefficient (0.8966) of education is positively signed and statistically significant at 1% alpha level suggesting positive effect of education on savings of the smallholder poultry farmers. This is suggestive of the fact that as small holder poultry farmers acquire more education, they get a better well-paid job that will increase their income. With increase in income, savings is also expected to increase.

Small holder poultry farmers access to farm credit gave a positive coefficient (0.644) and was highly significant at 1.0% alpha level, indicating that an increase in farmers access to farm credit would increase savings. The sign identity of this variable makes sense for the study and conforms to a priori expectation. Access to credit have been identified as an important factor in farm business and useful in funding transaction cost for farm wage activities (Ibrahim and Srinivasan, 2013). It also regarded as one for the key elements in raising productivity and income and hence savings.

The coefficient (0.825) of farm income per capital was significant and positive. The marginal effect value for farm income per capital was statistically significant at the 5.0% level. This implies that an increase in farm income of the small holder poultry fares will stir up increased amount of savings. Small holder poultry farmers with higher levels of income have a higher tolerant of risk. Hence, they are most likely to save more funds for the rainy days. Limited financial resources at the disposal of farmers' limit savings. This result also shows that household would spend more and save less with rising household income, household size and presence of dependent and risk group (infant and pregnant women). More is spent on infant, pregnant women and students for their upkeeps and schools and so smallholder household with this kind of household composition spends more and saves less and vice versa.

This is also suggestive of the fact that with increase in income, there is every tendency that households would save more for the rainy days.

Determinant of Investment Worth by Smallholder Poultry Farmers in the Study Area

The estimated regression analysis of the determinants of investment worth amount smallholder poultry farmers in the study area are presented in Table 4.10

Table 4.10: Multiple Regression Estimates of determinants of farm investment by smallholder poultry farmers.

Variable	linear	Exponential	Semi-Log	Double-Log+
Constant	40646.85 (0.27)	10.9132** (16.41)	-138546 (-0.21)	10.39314*** (3.64)
Age	3265.926 (1.41)	0.1386549 (7.22)	52789.12 (0.52)	1.359314** (2.79)
Education	17899.93 (0.89)	1.170292 (6.31)	-540.229 (-0.08)	0.48391 (1.44)
Farming Experience	-3812.515 (-1.00)	-0.0040525 (0.12)	-17574.2 (0.50)	-0.0101653 (-0.06)

Household size	1275.721 (0.15)	0.126213** (2.38)	-61309.2 (-0.69)	0.2513563 (0.60)
Access to credit	24543.54 (0.60)	1.803796** (6.16)	25311.57 (0.31)	0.2065713 (0.53)
Flock size	-17052.68 (0.96)	0.0521208 (0.31)	-60170.08 (-1.30)	-0.499369** (-2.27)
Savings	-0.0151787 (-0.10)	1.62e-07 (0.05)	-025018.08 (-1.46)	0.044764 (0.55)
Farm income	-0.0521564 (-0.53)	2.45e-07 (0.05)	12442.17 (0.37)	0.2559074** (1.60)
Expenditure	.1946495 (0.33)	7.39e-06 (0.99)	22809.55 (0.93)	2577418 (2.20)
R ²	0.2859	0.9696	0.3193	0.9889
Adjusted R ²	0.2241	0.9669	0.2437	0.9877
F-value	4.63***	7767.71***	4.22***	803.15***

Source: Field survey data, 2021

,,*: variables statistically significant at 1.0%, 5.0% and 10.0% risk levels respectively. Figures in parenthesis are t-ratio. + = Lead Equation

..... Statistical and econometric considerations, the double-log functional form was chosen as the lead equation. The coefficient of determination (R²) is 0.9889, implying that the explanatory variables accounted for about 98.89% of the change in the amount invested in farming. The overall significance of the model was measured using F-test, which has a value of 50:15 which is significant at 1.0% risk level.

Specifically, the coefficient (1.359314) of age was positive and statistically significant at 99.0% confidence level. This implies that age has direct influence on the farm investment, as increase in age of farmer increases the amount invested in farming. Ibrahim and Srinvisan (2013) supported this assertion that rural households' likelihood to invest in farm activities increases as they grow older. This outcome may be due to the farming experience gathered over the years. Due to the risk and uncertainty associated in farming younger people with less farming experience invested much fund non-farming enterprise.

The coefficient (0.2577418) of years of experience in farming had a statistically significant and positive effect on the amount invested in farming. This implies that investment amount in farming increases amount farmers within some range of years' experience. This could be explained by the fact that small holder farmers who are highly experienced in farming and most likely older farmers are not very active economically to invest on non-farm enterprise investment opportunities. They therefore prefer to depend and invest on farming only. This implying that as individuals increases his farming experience through training and learning, his investment in farming likewise increases. This affirms the earlier finding of Bosma, et al. (2009) who deduced that having had experience in farming increases investment

amount in such enterprise. The marginal effect value for years of experience in farming was statistically significant at 5.0% significance level.

The coefficient (0.2559074) of farm income per capita was significant and positive. The marginal effect value for farming income per capita was statistically significant at the 10.0% level. This implies that an increase in farm income of the small holder farmers will stir up increase amount invested in farming. Small holder farmers with higher levels of income have a higher tolerance of risk. Hence, they are most likely to invest more funds in farming. Limited financial resources at the disposal of farmer’s act as barrier to entry in farm enterprise investments. This outcome contradicts the finding of Oseni and Winters (2009 who reported in their studies in that households with increased farm income are more likely to diversity and invest off-farm income generating activities, hence undertake of farm work.

The coefficient of flock size (0.499369) is negatives and statistically significant at 5.0% a level that indicates that an increase in flock size leads to decrease in the amount invested in farming although the negative coefficient of flock size is at variance with a prior expectation. It efficiency in the use of land rather that expansion of cultivated areas as a necessary That could increase the capital investe4d in farming. This result is expected considering the small scale nature of the farmers in the study area. The results disagree with Onwuka (2005) and Oputa (2005) that the larger the farm, the more quantities inputs that would be needed in the farm, hence greater investment expenditure and income.

Challenges Facing the Poultry Farmers in Accumulating Savings And Expanding Investment In The Study Area.

The constraints identified by the respondents that inhibit their attempt to save and invest as small holder farmers are shown in Table 4.11

Table 4.11: Constraints of savings and investment by small holder poultry farmers in the study area.

Constraints	Frequency*	Percentages
Inadequate income	80	80.00
Ill health	31	31.00
Insecurity of their income	67	67.00
Family and societal demand	45	45.00
Misuse of money	44	44.00
Remoteness of bank	61	61.00
High bank charges	37	37.00
Delay and congestions at bank	25	25.00

Source: field survey, 2021

****Multiple responses recorded***

The smallholder poultry farmers identified several constraints to their inability to put part of what they earn aside for use in the future. The main constraints to the small holder poultry farmers inability to save is inadequacy of income which was identified by 80.00% of the respondents. According to this category of respondents, their incomes are not able to meet their needs let alone some bring left of savings. They conceded that though they always try and wish to save, they are unable to do so due to their limited incomes.

Remoteness of banks (61.00%) was also found to hinder the small holder poultry farmers saving abilities. Another hindrance to the small holder poultry farmer's ability to save also has to do with the monies will not be safe if they save it in both formal and informal forms. Some of them (67.00%) mentioned that people might abscond with their savings or thieves may enter their homes and make away their savings. Pressure from the extended family as well as members of the society at large were also identified by another 45.00% of the respondents as constraining their ability to save money. 44.00% of the respondents also identified their own inability to manage their financial resources very well as constraints to their savings abilities. Other problems such as high bank charges (37.00%) delays and congestions at the banks (25.00%), another 31.00% of the respondents also mentioned ill-health as a hindrance to their ability to save money. According to these people, constant illness depletes any money that they may have and may want to put aside for future use.

Summary

.... Investigated the determinants of savings and investment patterns among-small holder farmers in Umuahia agricultural zone of Abia state. The specific objectives were to the socio-economic attributes of smallholder poultry farmers in the study area, identify is prevailing investment patterns among the poultry farmers in the study area; estimate the determinants of investment worth by smallholder poultry farmers in the study area and identify the major challenges facing the poultry farmers in accumulating savings and expanding investing in the study area.

..... sampling technique was used to select 100 smallholder poultry farmers and information and elicit from the respondents using well-structured questionnaire. Descriptive and multiple regression analysis were used to analyze the data collected. Result of analysis showed that majority of the respondents were married with a moderate household. Majority of them literate.

Result also show that the most preferred savings outlets of small holder farmers in the stud area were the informal savings outlets mainly self-help groups. It was evident from the research that there is the propensity to save amount farmers in the study area, in spite of low income.

There are factors that have positive influence on saving behaviour of small holder poultry farmers surveyed such as level of income, household size, education, age and access to credit meanwhile, the OLS results of the estimated determinants of investment patters with double-log functional form as the lead equation shows that are, flock size, farm income and expenditure influenced investment patters significantly. The main constrains to the small holder poultry farmers' inability to save are inadequacy of income, ill-health and fear of safety of their income.

Conclusion

The study has shown that the most preferred savings outlet of smallholder poultry farmers in the study area were the informal savings outlets. There is the propensity to save and invest among small holder farmers in Umuahia agricultural zone of Abia State, Nigerian in spite of low income.

Recommendation

Based on the principal findings of this study, the following recommendations are made

1. Given the significance of the income factor in terms of savings, incentivizes such as improved technology, appropriate farm support services, medium and long term loans should be provided by the government and other bodies to farmers in order to boost their income level. Only then can the savings be accumulated in the rural economy.
2. Policies on tax rate reduction and free or subsidized education are strongly advocated. These will reduce their expenditure and subsequently increase their aggregate monthly income, which is positively related to saving. Policies that reduce household size will improve savings of the farmers in the study area.
3. Small holder poultry farmers should be encouraged to form cooperative society to enable them access credits from banks as this will encourage the accumulation of social capital in form of savings.

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EFFECTS OF WOMEN COOPERATIVE SOCIETY ON ENSURING FOOD SECURITY IN OGBARU LOCAL GOVERNMENT AREA OF ANAMBRA STATE, NIGERIA

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Abstract

The study investigated Effects of the Activities of Women Cooperative Society on Ensuring Food Security in Ogbaru Local Government Area. Data were obtained from 10 functional and active cooperatives in the study area, a total of one hundred thirty-seven (137) copies of questionnaire were distributed among the respondent representing 100% of the sample size, fifteen (15) copies of the questionnaires were improperly filled representing 11% and one hundred and twenty-two (122) copies of the questionnaire were properly filled representing 89%, the data collected were subjected to analysis with both descriptive and inferential statistics, using the frequency distribution and percentage table. The stated hypothesis was tested with Regression Analysis. Evidence from the study revealed that there is a significant effect of the activities of women cooperative and food security in the study area. There was strong evidence from the study that food availability will increase when agricultural input and supports are mobilized. Findings from the study also revealed that growth in food availability was proxy for the provision of credit facilities by women cooperative. It was also observed that women cooperative is faced with some constraints that hindered them from increasing their efficiency and effectiveness. Therefore, in order to strengthen their role in achieving food security, the following recommendations were made: That cooperative policy that favours the growth of these cooperatives by putting in place financial institutions that could increase the credit facilities to the women farmers in particular at low interest rates. There is need for re-orientation and more sensitization on leadership as it is paramount to the success of any organization and this explains the failure of many cooperatives since they lack proper coordination, administrative skills and managerial acumen.

Keywords: *Women Cooperatives, Food Security, Cooperative services, Ogbaru local government area.*

Introduction

The quest for food and the desire to satisfy hunger is undoubtedly man's most important need (Ijatuyi, Omotayo, & Nkonki-Mandleni, 2018). To meet this basic need, there must be physical, social and economic provision and access to safe, sufficient, and nutritious food. Meeting the dietary needs and food preferences of all races, at all times, such that an active and healthy life is guaranteed; is commonly referred to as food security (Food Climate Research Network, 2018). In a broad sense,

food security involves the entire food system and touches issues like: quantity of food available for households, the nutrition needs of each member, and the distribution of the food. Oluwaseun, (2020).

Food and Agricultural Organization (FAO, 2017), added that food security is achieved when all the four pillars – availability, access, utilization, and stability – are met. Availability ensures there is trustworthy and consistent source of food; access concerns the capability of individuals in having sufficient resources to produce and/or purchase adequate food; utilization aspect deals with people having adequate knowledge and fundamental sanitary conditions to select, prepare, and distribute food capable of providing good nutrition; while stability sees to the sustenance of the availability, access and utilization over time (Swiss Agency for Development and Cooperation (SDC)(2017). Therefore, the ultimate goal of food security is to ensure that health of individuals and households are secured.

In the globe, about 800 million people are hunger stricken; but gruesomely, close to 2 billion suffer deficiencies particular to micronutrient (SDC, 2017). While poverty might cause hunger. Oluwaseun (2020) noted that issues like inability of households to combine right nutrients and food is not poverty related. Of the many factors that can cause food insecurity, conflicts, terrorism, drought, pest and disease are notable (FSIN, 2017); and in some cases, unexpected surges in the economic circumstances of households, like: loss of income, increased household size/bills, inflation etc. can lead to food insecurity (Seivwright, Callis & Flatau, 2020).

In considering the fact that women are ideally great home builders and can also make and create changes in society, the need to ensure that women are key players of the mainstream activities of cooperative societies in enhancing food security, becomes a need. Cooperative is viewed as an organization for the promotion of the economic interests of its members; it does not confine itself only to the economic aspect. It also permeates the social aspect of life and aims at establishing a new democratic social order based on freedom and equality, where people live in harmony, caring and sharing like a family, where there is a unity of spirit and common economic bond. Onuoha et al (2021).

Cooperative has been the bedrock of promoting individuals through its numerous income yielding ventures that will elevate and stimulate the economic status of individuals. Hence, aiding them in becoming active contributors in, and benefiting from all aspects of the national economy, and ensuring that they receive an adequate education, training and opportunities for achieving their full potentials while achieving growth.

However, the activities of women cooperative can be decomposed to be; Provision of loan, credit and on-lending facilities to members, offering trainings on agro-preneurship, Processing/value addition of farm output, providing access to favorable

market for farm output, Supply of quality and affordable farm inputs, providing agricultural extension services for members, etc. while food security can be decomposed to be; food availability, affordability, accessibility, etc Hence, this research attempts to determine how the provision of credit and lending facilities can ensure food availability, which will at the same time increase food affordability in Ogbaru local government area of Anambra state, Nigeria.

Statement of the Problem

In Africa, women are known to produce up to 80% of the food. However, they receive very limited inputs like only 7% of agricultural extension services, less than 10% of the credit offered to small-scale farmers, and own only 1% of the land (FAO, as cited in Uche 2021). In this context, women are often found concentrated in subsistence agriculture and unpaid farm work making it tedious for them to attain ensured food security. Women cooperatives will increase women's access to productive resources and opportunities including job creation, extension services, productive inputs, and market information (Uche 2021) that could increase the rate of food security within the region.

While it is evidenced that food security at household level is poor in developing countries such as Nigeria (Lutomia, 2019). This is so as women are constrained by gender inequalities displayed in obstacles like: poor access to productive resources (land, credit, fertilizers, improved livestock and seeds etc); low education; poor extension services contact etc. (Abebe, 2017).

Cooperatives from their antecedents are known to be a channel through which socially and economically marginalized persons have sought to improve their lot. There is impressive presence of Cooperatives in Nigeria most especially in the Eastern part but has perhaps not been given attention. The extent to which the social and economic activities of cooperative societies translate to the empowerment of women especially in ensuring food security in the Eastern part of Nigeria has not been given desired attention, hence this research intends to examine effects of the activities of women cooperative society on ensuring food security in Ogbaru local government area of Anambra state, Nigeria.

Objective of the Study

The broad objective of the study is to investigate the effects of the activities of women cooperative society on ensuring food security in Ogbaru local government area of Anambra state, specifically, this study tends to:

1. Determine the effect of the provision of credit by women cooperatives on food availability in Ogbaru local government area of Anambra state
2. Examine the effect the provision of agricultural input by the women cooperatives on food availability in Ogbaru local government area of Anambra state.

3. Assess the effect of cooperative extension services on food availability in Ogbaru local government area of Anambra state.

Research Questions

The following research questions were raised to guide the study:

1. What are the effect of the provision of credit by women cooperatives on food availability in Ogbaru local government area of Anambra state?
2. What are the effect of the provision of agricultural input by women cooperatives on food availability in Ogbaru local government area of Anambra state?
3. How have extension services affected food affordability in Ogbaru local government area of Anambra state?

Research Hypothesis

In order to achieve the study objective, the following hypothesis is formulated;

Ho: There is no significant effect of the activities of women cooperative on food affordability in Ogbaru local government area of Anambra state

Hi: There is a significant effect of the activities of women cooperative and food affordability in Ogbaru local government area of Anambra state

Conceptual Review

Food Security

Basically food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. However, household food security is the application of this concept to the family level, with individuals within households as the focus of concern. FAO (2021) opined that the number of people in the world affected by hunger continued to increase in 2020 under the shadow of the COVID-19 pandemic. After remaining virtually unchanged from 2014 to 2019, the Prevalence of undernourishment increased from 8.4 percent to around 9.9 percent between 2019 and 2020, heightening the challenge of achieving the Zero Hunger target in 2030. The 2020 estimate ranges from 9.2 to 10.4 percent, depending on the assumptions made to reflect the uncertainties around the assessment.

In terms of population, it is estimated that between 720 and 811 million people in the world faced hunger in 2020. Considering the middle of the projected range (768 million), 118 million more people were facing hunger in 2020 than in 2019, with estimates ranging from 70 to 161 million. The numbers show enduring and troubling regional inequalities. About one in five people (21 percent of the population) was facing hunger in Africa in 2020 – more than double the proportion of any other region. This represents an increase of 3 percentage points in one year. more than half (418 million) live in Asia and more than one-third (282 million) in Africa. While Latin America and the Caribbean accounts for about 8 percent (60 million). Compared with 2019, 46 million more people in Africa, almost 57 million more in Asia, and about 14

million more in Latin America and the Caribbean were affected by hunger in 2020. Ugbodaga (2021).

Food security is the measure of the availability of food and individuals' ability to access it. United Nations' Committee on World Food Security, defined it, as all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. The availability of food irrespective of class, gender or region is another one. There is evidence of food security being a concern many thousands of years ago, with central authorities in ancient China and ancient Egypt being known to release food from storage in times of famine. The term "food security" was defined with an emphasis on supply; food security is defined as the "availability at all times of adequate, nourishing, diverse, balanced and moderate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". Later definitions added demand and access issues to the definition. The first World Food Summit, held in 1996, stated that food security "exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." Abbate, (2017).

Similarly, household food security is considered to exist when all members, at all times, have access to enough food for an active, healthy life. Individuals who are food secure do not live in hunger or fear of starvation. Food insecurity, on the other hand, is defined by the United States Department of Agriculture (USDA) as a situation of "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways". Food security incorporates a measure of resilience to future disruption or unavailability of critical food supply due to various risk factors including droughts, shipping disruptions, fuel shortages, economic instability, and wars. The Food and Agriculture Organization of the United Nations, identified the four pillars of food security as availability, access, utilization, and stability. The United Nations (UN) recognized the Right to Food in the Declaration of Human Rights in 1948, and has since said that it is vital for the enjoyment of all other rights Raj (2019). The main global policy to reduce hunger and poverty is in the Sustainable Development Goals. In particular Goal 2: Zero Hunger sets globally agreed on targets to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture by 2030.

Women Cooperative Activities:

Contemporary world economic order shows that women have become critical in the affairs of any nation especially in economic and national development process, either in the formal or informal sector, urban or rural areas. The participation of women in the economic life of a country like Nigeria, is only one aspect of their changing roles in the society, Amanze, (2018). Augonus (2017) captures the changing role of women

in Nigeria when she remarks that most topical issues in international or global development agenda is women. Today, issues about women have taken varied nomenclatures such as women issues, women concern, women in development, women in politics and even women in science and technology. Varied as the nomenclatures may be, there is however, global consensus that international development plans must include strategies for the integration of women into the development and economic process. One of the areas that women in Nigeria, particularly at the rural level are expected to be actively involved is in cooperative activities. With participation in cooperative activities, women may be able to change some of their social economic realities in forms of creating opportunities for self-actualization economically, modify public perception on their status and more importantly improve their overall standard of living. Contemporary world economy has made the role of women to be no longer limited to child bearing and home management they have become critical stake-holders in the economic and social advancement of their families and societies (Okafor, 2016).

Women cooperative society is a collective action wherein at least two women interact or coordinate actions to achieve a mutual benefit. Smith, (2021). Thus, women cooperation will evolve if the fitness benefit from women cooperation outweighs the cost. However, the importance of food security among individuals in both rural and urban areas have brought about the intervention of women cooperative societies as a factor in ensuring that both financial, economic, input, ready market, resources among others, are available to tackle the issues of food scarcity. Local and international organizations have continued to explore the best modalities in the application of cooperatives to foster economic growth via the agro industry in almost every area of the economic needs from individuals to enterprises in rural and urban areas. Sergio (2019).

Women cooperative activities therefore refer to all aspects of participation in a cooperative business either in conceiving, planning, administering, funding and marketing.

They must serve a market efficiently and effectively, they must be well managed, and they must survive financially. However, there are important distinctions that make cooperatives unique.

Food Availability

This is achieved when sufficient quantities of food are consistently available to all individuals within a country, and there's Improved access to food-through increased agricultural productivity and incomes-is essential to meet the food needs of the world's growing population. "It also relates to the supply of food through production, distribution, and exchange. Food production is determined by a variety of factors including land ownership and use; soil management; crop selection, breeding, and management; livestock breeding and management; and harvesting. Crop production

can be affected by changes in rainfall and temperatures. The use of land, water, and energy to grow food often competes with other uses, which can affect food production. Land used for agriculture can be used for urbanization or lost to desertification, salinization, and soil erosion due to unsustainable agricultural practices. Crop production is not required for a country to achieve food security. FAO (2016).

Food consumers outnumber producers in every country, food must be distributed to different regions or nations. Food distribution involves the storage, processing, transport, packaging, and marketing of food. Food-chain infrastructure and storage technologies on farms can also affect the amount of food wasted in the distribution process. Poor transport infrastructure can increase the price of supplying water and fertilizer as well as the price of moving food to national and global markets. Around the world, few individuals or households are continuously self-reliant for food.

This is reinforced by Agarwal (2019) who identifies the various types of participation that represent an entire continuum. These are: a) Nominal participation: membership in the group, b) Passive Participation: being informed of decisions ex post facto; or attending meetings without speaking out, c) Consultative Participation: being asked an opinion on specific matters without guarantee of influencing decisions, d) Activity-specific participation: being asked to (or volunteering to) undertake specific tasks, e) Active participation: expressing opinions, whether or not solicited, or taking initiatives of other sorts and f) Interacting (empowering) participation: having voice and influence in the group's decisions. Agarwal (2019) informs, that participation of women in cooperatives in order to ensure food security, can be nominal, passive and a mere formality, yet it would still be considered as participation of women in agricultural cooperatives. Women's active participation at various levels within agricultural cooperatives has been found to positively contribute to different development outcomes. According to a workshop organized by Agriterra and supported by Agri-Pro focus for female leaders of agricultural cooperatives in Embu Kenya in 2015, the following development outcomes were identified:

- (i) Having men and women in the board and management of the cooperative contributes to better leadership and increased competitiveness of the cooperative,
- (ii) Women are important for the production, involving them as members contributes to increased production and higher profitability of both cooperative and the farm as a family enterprise,
- (iii) Increasing the access of women to the services (training and other resources) of the cooperative contributes to the introduction of new farming techniques and innovation and
- (iv) Inclusion of women on an equal footing in the cooperative, and joint decision making on the family income will contribute to the motivation of women to

become active members of the cooperative and contribute to the production of more and better produce.

Cooperative credit and food availability

Access to credit is a crucial factor in ensuring food availability and the development of the agricultural sector. Agricultural producers rely on credit facilities to raise the capital required to initiate and sustain production activities. The role of credit in agricultural production is crucial because inputs such as seeds and fertilizers are purchased at the beginning of the production season, but returns are realized only at the end of the season. Masuku et al, (2016). The provision of credit has been regarded as an important tool for raising the incomes of rural populations, mainly by mobilizing resources to more productive uses. Agricultural credit plays an important role in ensuring food availability while at the same time, enhancing agricultural productivity in developing countries like Nigeria. Muhammad (2017), stated that agricultural growth depends on increased use of agricultural inputs, technological change and technical efficiency. He also argued that technological change is the result of research and development efforts, while technical efficiency with which new technology is adopted and used more rationally is affected by the flow of information, better infrastructure, availability of funds and farmers' managerial capabilities. The optimal use of inputs requires funds at the disposal of farmers. These funds could come either from farmers' own savings or through borrowings. In less developed countries like Nigeria where savings are negligible especially among the smallholder farmers, agricultural credit becomes an essential input along with modern technology for higher productivity. Credit requirements of the farming sector have increased rapidly over the past few decades resulting from the rise in use of fertilizer, improved seeds and mechanization and hike in their prices. Research has shown that institutional credit affects agricultural output also through financing of capital investment and the responsiveness of agricultural output is larger to institutional credit than that of output to fertilizer.

Credit support of the households could serve as a policy tool for alleviating the food insecurity. Credit allows poor households to engage in income-generating activities and investments to improve their livelihoods. Efforts have been made by the government to deliver credit services to rural households through a number of programs, among these efforts is the establishment of cooperatives. Cooperatives play a key role in tackling rural poverty and increasing food security, accessibility and affordability. Shiferaw (2016). Rural households with low income pull their resources together to form cooperatives in order to generate more income. Cooperatives pool different resources such as credit, information and labour among members to achieve mass production and purchase food or satisfy other basic needs of its members. Hence, they play an important role in supporting long-term food availability.

Agricultural input and food availability

There is a recognition that the use of improved inputs improves food availability and production for local and export purposes. In Nigeria, a large chunk of farmers operate on small-scale basis under challenges associated with socio-economic, cultural and institutional conditions (Anumudu, Ugwuanyi, Asogwa & Ogbuakanne, 2018). For Nigeria, as reported by World Bank report of 2016 showing an arable land of 37.33% of Land area, that is a potential of cultivatable 92million hectares with 34million hectares cultivated. This ignites an upward trajectory of food demand at 3.5% growth rate, given 2.83% population growth, while 2.5% growth rate is witnessed in food production in recent years. Despite 7% growth in agricultural production in 2006 to 2008, the apparent variation in food demand and production has led to: (i) a widening domestic food supply-total food requirement nexus; (ii) expanding food import bill (iii) and increasing food prices due to its short fall (Ewetan, Fakile, Urhie & Odutan, 2017). The practice of agriculture on land in Nigeria is structured around 3 major types, they are; upland or rain-fed farming, which represent 94%, lowland or swamp farming accounts for 8.3%, while irrigation farming activities takes 1.5%. However, since farming activities are principally rain-fed, they are subject to climate variabilities. With this connection, the increasing food demand has precipitated the proportional increase of area cultivated for various agricultural products.

Eze, Awulonu, and Okon (2018), stated that agricultural support is majorly public sector driven, via support in agricultural research and extension services, goods marketing, agricultural input supplies, and land legislation to speed up development of the agricultural sector. To this effect, marginal increases were recorded in the production of exportable agricultural commodities. However, the evolving scenario depicted output increase attributable to more planting of new areas than enhancing agricultural productivity and its global competitiveness, such that market opportunities were decimated for Nigeria. Agene & Adediran (2017) accentuate these facts while discussing the poor trajectory of agricultural productivity growth as witnessed since 1970s. For food availability to increase such that industrial development will be enhanced, as well as expanding the nation's export base, it requires mobilizing agricultural input and support for growth, given its veritable channel as an industrial hub, food supplies, and revenue earner.

Cooperative marketing and food availability

The establishment of cooperative marketing societies was another step which has been taken to overcome the problems arising out of the present system of marketing agricultural produce and ensuring food availability. The objectives of economic development and social justice can be furthered by channelizing agricultural produce and ensuring food availability through cooperative institutions. Farmers complain of the marketing system because they get lower prices, due mainly to high marketing charges and the prevalence of malpractices. The efforts of the government to ensure food availability and improve the marketing system of agricultural commodities have

been only partially successful in creating healthy conditions for scientific and efficient marketing. Moreover, the progress of regulated markets is not uniform in all areas. The need for strengthening marketing cooperative organization has, therefore, been recognized for ensuring food availability and the marketing of the produce of farmers and for making inputs available for them at the right price and time. However, marketing cooperative institutions are expected to function as competitors of private traders in the market. These organizations pool the produce of the small farmers having a small surplus to market and improve their bargaining power. They have also helped government agencies in the execution of the policy decisions bearing on ensuring food availability by the procurement and distribution of food grains and other essential commodities.

Here are some functions of co-operative marketing societies in ensuring food security:

- They market the product of the members of the society at fair prices in order to ensure food accessibility;
- They safeguard the members for excessive marketing costs and malpractices in order to ensure food affordability;
- They make credit facilities available to the members for the procurement of agricultural inputs;
- They make arrangements for the scientific storage of the members' produce thereby ensuring food quality assurance;
- They provide the facilities of grading and market information which may help them to get a good price for their produce;
- They introduce the system of pooling so as to acquire a better bargaining power than the individual members having a small quantity of agricultural produce for marketing purposes;
- They act as an agent of the government for ensuring food availability and the procurement of food grains and for the implementation of the price support policy;
- They arrange for the export of agricultural produce of their members so that they may get better returns;
- To make arrangements for the transport of the produce of the members from the villages to the market on collective basis and bring about a reduction in the cost of transportation; and
- To arrange for the supply of the inputs required by the farmers, such as improved seeds, fertilizers, insecticides and pesticides.

Cooperatives marketing ensure food availability by providing farm supplies, credit, and other services vary widely in success. So their benefits and limitations also vary. However, the benefits of cooperatives are difficult to measure. Some are tangible or direct as in the case of net margins or savings. Others are intangible or indirect such as cooperatives' effect on market price levels, quality, and service. Some are most

evident at the time the cooperative is organized but become more obscure as the years pass.

Activities of Women Cooperative in Ensuring Food Availability

Through the power of association, cooperatives and farmers' organizations have long demonstrated their capacity to help small scale producers overcome barriers to gain better access to resources and inputs, and thus to play a greater role in meeting the growing global food demand. For women producers, who are at a greater disadvantage, women cooperatives offer networks of mutual support and solidarity that allow them to grow their social capital, improve their self-esteem and self-reliance, acquire a greater voice in decision-making, and collectively negotiate better contract terms, prices and access to a wide range of resources and services including;

- Agricultural resources and assets;
- Markets to commercialize their produce;
- Credit, capital and other financial services; and social services.

Numerous examples from around the world demonstrate how women producers are socially and economically empowered through their membership in women cooperatives and farmers' organizations, allowing them to produce more, earn better incomes, and raise the living standards and economic and food security of their families and community at large.

Theoretical Framework

Group Action Theory of Development. This theory became relevant to the study because it is a community oriented model. This theory was propounded by Mancur Olson in 1965, which seeks to understand how groups of individual are able to come together to overcome their individual and collective problem. Group action in cooperative requires involvement of a group of people, a shared interest within the group and involved on some kind of common action which works in pursuit of that shared interest. Members can contribute in various ways to achieve the shared goal, money, labour among others. This action should be voluntary in order to distinguish group action from hired labour. This theory was chosen on the basis of people coming together to form an autonomous group with collective interest of development. This is in line with the 1995 ICA principles of voluntary and open membership, autonomous, and independent association of person with common interest. The Group Action Theory also creates a sense of community that increases the ability of the women cooperative members to work together collectively and participate in group decision making. This boosts member's self-confidence, self-reliance and self-esteem within the community.

Relevance to this Research Work

Group Action Theory of Development although is one of the earliest propounded theory of development is still very much relevant and applicable in present day women

cooperative society settings. Despite its shortcomings, it has been able to identify those needs that are peculiar to women and food security. Hence, it is vital that people come together to form an autonomous group with collective interest of development. In order to achieve high productivity levels as members (women) of the cooperative societies, should consider coming together as a group, the backbone of the society. Group Action Theory of Development posits that the interest of the members must first be given due consideration

Empirical Review

Onugu and Abdulahi (2013) appraise the performance of agricultural cooperatives in the National food security program. The study was carried out in the Aniri Local Government Area of Enugu State. The specific objectives of the study are to ascertain the socio-economic characteristics of farmers; identify the services available to farmers in the NPFS; determine the extent agricultural services are accessible in the NPFS, appraise the effect of using agricultural cooperative societies in the implementation of NPFS as well as examine the challenges. Data were obtained from both the ADP staff and cooperative farmers using a structured questionnaire. A simple percentage and statistical package for social sciences (SPSS version 17) were employed in analyzing the data and correlation analysis was used to pair the two variables (farmers and extension workers) and a t-test was used to test the hypothesis. The study revealed that agricultural cooperative societies are effective means of accessing agricultural services under NPFS.

Okafor, Okafor and Uzundu (2018), examined the role of women cooperative in agricultural development focusing on Awka south local government area of Anambra state. Sixty (65) farmer members were randomly selected from six women cooperative in the area. In this research, descriptive analytical method was used to investigate the specific objectives. They include descriptive statistics such as frequency distribution table, percentage, mean and standard deviation. For the hypothesis posed, t-test or t statistics was used to draw if there is any significant effect of the cooperative roles on the member's output. Likert scale analysis was used to examine the perception of members on how cooperative functions\activities such as input supply, marketing and processing have brought about an enhancement to their economic well represented by output. The researcher found out that women cooperative in the area has played significant role in marketing and processing of their member's agricultural produce. The effect of the cooperative functions\activities (input supply, marketing and processing) has significantly improved the income and standard of living of the women farmer member of cooperative in the area. Women cooperative are encouraged to process and market their member's agricultural produce since it has strong significant effect on their member's income, and also provide credit and improved varieties of inputs to their members at appropriate time to enhance their productivity. On the other hand, government should aid those women cooperative in the area by giving them loan and grants to boost their productivity and also construct a good road

network for easy evacuation of their produce to the cities where they will attract more income to the women cooperative.

Methodology

The descriptive survey design was adopted for the study. The area of study is Ogbaru local government Area of Anambra State. The Population of this study consists of all registered and functional agricultural cooperatives Societies in Ogbaru Local government area. Information from the divisional cooperatives office in charge of the local government revealed that the population of agricultural cooperatives societies in the area of study are 50 active cooperative societies with membership strength of 703. Ten cooperatives were randomly selected. These ten (10) selected cooperative have membership strength of 210

In determining the sample size of this study, Taro Yamane (1967) was applied by the researcher.

Taro Yamani's formular was used to determine the sample size.

Formular

$$= n \frac{N}{1+N(e)^2}$$

Where: n = Sample size

N = Population of the study

1 = Constant value

e = Error in margin usually 5%

$$n = \frac{210}{1+210(0.05)^2}$$

$$n = \frac{210}{1.525}$$

$$n = 137$$

With the above calculation, one hundred and ninety-seven (137) questionnaires was distributed.

Data Analysis

What are the effect of provision of credit by women cooperative on food availability?

TABLE 5: Distribution Based on the effect of provision of credit by women cooperative on food availability

S/N	ITEMS	SA (5)	A (4)	UD (3)	D (2)	SD (1)	X	DECISION
I	Agricultural producers rely on credit facilities to raise their capital, and sustain food availability	44 (220)	38 (152)	20 (60)	15 (30)	5 (5)	3.8	Accept
ii	Incomes and food availability in rural areas rise due to the provision of credit by women cooperative	51 (225)	39 (156)	19 (57)	12 (24)	1 (1)	3.8	Accept
iii	Credit support of the households could serve as a policy tool for alleviating the food insecurity	61 (305)	35 (140)	17 (51)	8 (16)	1 (1)	4.2	Accept
iv	Women cooperatives resources aid members in achieving mass production and purchase food	65 (325)	41 (164)	9 (27)	6 (12)	1 (1)	4.3	Accept
v	Agricultural credit ensures food availability and enhance agricultural productivity	67 (335)	35 (140)	19 (57)	1 (2)	-	4.3	Accept
GRAND MEAN							4.1	

Source: Field Survey, 2022

What are the effect of the provision of agricultural input by women cooperatives on food availability

TABLE 6: Distribution Based on provision of agricultural input by women cooperatives on food availability?

S/N	ITEMS	SA (5)	A (4)	UD (3)	D (2)	SD (1)	X	DECISION
I	The use of improved inputs improves food availability and production for local and export purposes	40 (200)	60 (240)	15 (45)	7 (14)	-	4.0	Accept
ii	Food availability is being driven by agricultural development which is a veritable tool,	67 (335)	35 (140)	19 (57)	1 (2)	-	4.3	Accept
iii	For food availability to increase such it requires mobilizing agricultural input and support	30 (150)	54 (216)	26 (78)	10 (20)	2 (2)	3.8	Accept

iv	Extension services, goods marketing, and agricultural input supplies aid the development of the agricultural sector.	34 (170)	54 (216)	20 (60)	13 (26)	1 (1)	3.8	Accept
v	Large-scale farming takes place to ensure food availability within the local market and for export purposes	44 (220)	38 (152)	20 (60)	15 (30)	5 (5)	3.8	Accept
GRAND MEAN							3.9	

Source: Field Survey, 2022

How have extension services affected food affordability

TABLE 7: Distribution Based on Contributions of cooperative societies on annual income of the farmers.

S/N	ITEMS	SA (5)	A (4)	UD (3)	D (2)	SD (1)	X	DECISION
I	Extension workers aid the supply of improved inputs such as seeds, fertilizers, insecticides and pesticides required by the farmers to enhance food availability	60 (300)	50 (200)	10 (30)	2 (4)	-	4.3	Accept
ii	Extension workers act as agent of the government for ensuring food availability, procurement and the implementation of the price support policy	68 (340)	47 (188)	-	7 (14)	-	4.4	Accept
iii	Extension workers make recommendation of facilities for grading market information which may help them to get a good price for their agricultural produce;	33 (165)	64 (256)	20 (60)	5 (10)	-	4.0	Accept
iv	Extension workers pioneers the efforts of the government to ensure food availability and improve the marketing system	37 (187)	55 (220)	17 (50)	13 (26)	-	3.9	Accept

V	Extension services foster economic growth via the agro industry in almost every area of the economic needs from individuals to enterprises in rural and urban areas.	67 (335)	35 (140)	19 (57)	1 (2)	-	4.3	Accept
GRAND MEAN							4.15	

Source: Field Survey, 2022

Test of Hypothesis

Ho: There is no significant effect of the activities of women cooperative and food availability in Awka North local government area of Anambra state

Hi: There is a significant effect of the activities of women cooperative and food availability in Awka North local government area of Anambra state

Table 8: Result of SPSS Regression Analysis

a. Dependent Variable: FOOD AVAILABILITY

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.870 ^a	.756	.736	9360080.40

a.

Predictors: (Constant), ACTIVITIES OF WOMEN COOPERATIVE

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.3E+015	1	3.264E+015	37.253	.000 ^a
	Residual	1.1E+015	12	8.761E+013		
	Total	4.3E+015	13			

a. Predictors: (Constant), ACTIVITIES OF WOMEN COOPERATIVE

b. Dependent Variable: FOOD AVAILABILITY

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3549722	3758069			.364
	ACTIVITIES OF WOMEN COOPERATIVE	4.044	.663	.870	.945	.000
					6.104	

a.

Dependent Variable: FOOD AVAILABILITY

This hypothesis was used to test the effect of the activities of women cooperative and food availability in Ogbaru local government area of Anambra state. Growth in food availability was proxy for the provision of credit facilities by women cooperative was the explanatory variable. At prob > F value of 0.000 less than 0.005 percent, the OLS model is very significant, and fitted the data reasonably well. Again, the adequacy of the model was found to be a good fit with the coefficient of determination computed at 0.736. In other words, approximately 74% of the changes in food availability are attributed to changes in the explanatory variable, i.e. food availability will increase when agricultural input and supports are mobilized. The coefficient of the statistics at 4.044 is positive and significant.

Conclusions

The study concluded that much effort has been made in examining the contributions of women cooperative societies in ensuring food availability in Ogbaru L. G.A. The analysis of this study shows that there is a major impact of the effect of the activities of women cooperative societies towards improving and ensuring food security (affordability) and farming system which helps cooperative members to obtain high quality farm inputs. The study concluded that the ways that women cooperative can adequately improve and ensure food availability is by providing credit facility to their members to obtain higher returns from product sales. The study also concluded that there is a significant relationship between women cooperative activities and food security, which aid members in accelerating input enhancement for quantitative and qualitative output. Embracing the concepts and ideology of women cooperative in the agricultural sector is the key to effective and efficient development of agriculture (food availability) in Ogbaru L.G.A.

Recommendations

Based on the findings and conclusion of this research work, the following recommendations are offered:

1. It is obvious that women cooperative societies have limited financial resources to execute their onerous agricultural activities in ensuring food availability. This could generate women and agricultural cooperative policy that favours the growth of these cooperatives by putting in place financial institutions that could increase the credit facilities to the women farmers in particular at low interest rates.
2. Leadership is paramount to the success of any organization and this explains the failure of many cooperatives since they lack proper coordination, administrative skills and managerial acumen. Government at all levels should be interested in the formulation, administration and accountability through the related agencies such as Ministry of Commerce and Industry by supervising these women cooperatives with a view to ensuring stability and continuity of the organizations.

3. In this regard, all cooperatives in whatever form are seriously viewed as an effective strategy in the process of rural socio-economic transformation. It is capable of reducing regional imbalance between the privileged and under-privileged areas. In this regard, all hands should be on deck to ensure their successful operations in the country. This laudable goal can only be achieved if it is backed with legislative controls. The law should empower the cooperatives to perform certain functions such as strengthening the bargaining power as effective agents of socio-economic rural transformation. The cooperatives need proper education and enlightenment which can be achieved through government involvement.

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EFFECT OF RURAL FINANCE INSTITUTION (RUFIN) SERVICES ON RURAL HOUSEHOLD POVERTY REDUCTION IN ANAMBRA STATE

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Abstract

The study evaluated Effects of Rural Finance Institution services (RUFIN) in reducing rural household poverty. Multistage sampling technique was adopted to select 347 respondents (members of agricultural cooperative societies that are rural households' heads). Primary data was sourced through the use of structured questionnaire. Data collected were analyzed with both descriptive and inferential statistics with the help of SPSS version 20. The descriptive statistics used include frequency tables, simple percentage, weighted mean and Likert scale measure, while the inferential statistics used include Correlation, T test statistics model and ANOVA were used to test the hypotheses formulated. The result revealed, that most of the Rural Finance Institution (RUFIN) services (educational; technical support services (health) and credit were accessible to rural households. The study also revealed that Rural Finance Institution (RUFIN) educational services have greatly impacted (grand mean(x) = 3.273) positively on the rural household literacy level. Similarly, the result of hypothesis one also affirmed the significant influence of educational services on the improved rural household literacy level. Evidence from the study also revealed that technical support of Rural Finance Institution (RUFIN) services have effectively enhanced the rural household health conditions (grand mean(x) = 3.418). This evidence was further strengthened with result of hypothesis two tested which affirmed the linear (positive) relationship between the Rural Finance Institution (RUFIN) technical support services and improved health conditions of rural households. Evidence from the field survey revealed that the rural household's standard of living was highly okay after they have accessed the credit services of RUFIN. Since the RUFIN services were greatly accessible to many rural households, therefore the following recommendations are made; RUFIN should improve on monitoring and supervision of credit utilization among the rural households who are the beneficiaries of the services, this will enhance effective utilisation and by extension it will generally improve their standard of living.

Key words: *Rural Finance, Poverty, Household poverty and Rural finance institutions*

Introduction

Awotide, Aihonsu and Adeokoye (2011) affirmed that in most developing countries (Nigeria inclusive), agriculture dominates their economy. It has been established that about 70 percent of Nigerian population are engaged in agriculture, while 90 percent of Nigeria's total food production comes from small farms, and 60 percent of the country's population earn their living from small farms (Oluwatayo, 2008).

The nature of agricultural production imposes significant discontinuities between the times the resources are committed in production at planting and in the generation of resources after harvest. Farmers who do not have sufficient resources to invest in such commitment (productive resources) will depend more on people in other sectors for the availability of credit. Facilitation of access to agricultural credit for rural farmers has, therefore, played a major role in the policy instrument for reducing rural poverty. As such, International Fund for Agricultural Development (IFAD) recognised this challenge, as well as the vast potential to improve the livelihoods of rural households by increasing their access to a wide range of financial services and sound institution through IFAD subsidiary programme called Rural Finance Institutions (RUFIN). RUFIN is operating in 12 out of the 36 states of the federation and Anambra State is one of the recipients. RUFIN's objective is to develop and strengthen microfinance institutions (MFIs) and establish linkage between them and formal finance institutions, in order to create a viable and sustainable rural finance system. RUFIN's target group consists of women, youth, physically challenged and farmers.

According to Macheke (2013), Rural Finance Institutions (RUFIN) comprises credit, savings, and insurance (or insurance substitutes) in rural areas, whether provided through formal or informal mechanisms. RUFIN tends to be associated with enterprises development, which also includes savings and insurance mechanisms used by the poor to protect and stabilize their families and livelihoods (Malaba, 2012).

Anambra State rural areas are characterized by higher transaction costs for both financial institutions and their clients (World Bank, 2010). These rural economies have higher systematic risks, more volatile cash flows, and economic agents with lower risk bearing ability and higher vulnerability to economic and natural shocks due to higher incidence and depth of poverty, and the situation becomes even more complicated in Anambra State because of erosion, flood and consequences of climatic change.

To overcome these crucial challenges, increasing efforts are being made to involve in the provision of financial services by various rural organisations, such as cooperative societies. Cooperatives permit economies of scale for their members to have access to financial services. They (cooperatives) are particularly well suited to providing financial services to rural people as they operate at grassroots level among people who know each other well, which is a basic condition for trust. Often, a cooperative is the

only financial institution in a rural area and is, therefore, an obvious structure for the operation of new financial services to complement the efforts of RUFIN in Anambra state.

The IFAD Rural Finance Institution (RUFIN) policy provides guidance to IFAD-supported rural financial services programme and projects, and their components, given its focus on women, young people, indigenous people and very poor households. IFAD concentrates on rural microfinance with “micro” referring to the relative size of the financial transactions, including savings, remittances, leasing and risk management services, small-scale farmers and livestock producers. (IFAD, 2014). Similarly, the provision of financial services to poor rural households face many challenges, including weak infrastructure, the limited capacity of financial service providers, and low level of clients education.

In a changing global economy and in the context of the widening financial crisis, volatile food and agricultural commodity prices and the perils of climate change, developing inclusive rural financial systems and fostering innovations to increase the access of poor and marginalized women and men to a wide range of financial services is central to IFAD’s mandate (IFAD, 2014). Giving the numerous challenges inherent in remote marginal areas in conflict and post conflict situations, and areas recovering from natural disasters (flood and erosion) in Anambra State, the development of innovative products and delivering mechanisms is critical to meeting the needs of RUFIN target group.

Statement of the Problem

The poverty line represents the value of basic needs (food and education, low income and savings, health care, shelter) considered essential for meeting the minimum socially acceptable standard of living within a given society (UNDP, 2006). The National Poverty Rate is the percentage of a population of a country living below the poverty line (Uche, 2000). According to World Bank (2015), the number of people living below the poverty line in Nigeria is estimated to be 97 million as at 2014.

According to Soludo (2005) “robust economic growth cannot be achieved without putting in place well focused programmes to reduce poverty through empowering the people by increasing their access to factors of production, especially credit. The latent capacity of the poor for entrepreneurship would be significantly enhanced through the provision of rural finance services to enable them engage in economic activities and be more self-reliant; increase employment opportunities, enhance household income and create wealth.

In order to enhance the flow of financial services to Nigerian rural areas, the Federal Government both present and the past, initiated a series of publicly-financed micro/rural credit programmes and policies targeted at the poor. Notable among such programmes were the Rural Banking Programme, Sectorial allocation of Credits, a

concessionary interest rate, and the Agricultural Credit Guarantee Scheme (ACGS). Other institutional arrangements were the establishment of the Bank of Agricultural (BOA), Bank of Industry (BOI), the National Directorate of Employment (NDE), the Nigerian Agricultural Insurance Corporation (NAIC), the Peoples Bank of Nigeria (PBN), the Community Banks (CBs), and the Family Economic Advancement Programme (FEAP). In 2000, Government merged the NACB with the PBN and FEAP to form the Nigerian Agricultural Co-operative and Rural Development Bank Limited (NACRDB) to enhance the provision of finance to the agricultural sector. It also created the National Poverty Eradication Programme (NAPEP); National Economic Empowerment Development Strategy (NEEDS) with the mandate of providing financial services to reduce poverty. But all these have not really yielded much result in the reduction of rural household poverty in Nigeria (Ayeyomi, 2003; Awotide and Adekoya, 2013; Zakaree, 2014). Anambra State rates low in household poverty level, but when comparing the urban to rural household poverty level the urban poverty level is okay and the rural household is fairly okay compared to some states in the north (Annual Abstract of Statistics, 2012).

As a result of the challenge faced by rural households, many researchers (Kareem, Arigbabu, Akintayo and Badmus, 2012; Adetiloye, 2012; Awotide and Adekoya, 2013; Egbetunde, 2012; Zakaree, 2014) also have conducted a lot of studies for policy implications on how to reduce rural household poverty, but majority of these studies focused on Agricultural Credit Guarantee Scheme fund and Bank Credits, cooperative credit and there is no documented evidence so far of any study conducted on IFAD's Rural Finance in Anambra State due to perhaps the fact that RUFIN is still a new intervention scheme when compared with programmes mentioned earlier. Specifically, and to the knowledge of the researcher, studies have not been really conducted to assess the contributions of RUFIN in providing financial services; technical services; educational services to rural households' literacy level and their standard of living in Anambra State. The communities in the State are known for their agricultural potentials, but rates low in the United Nations Organisation (UNO) Multidimensional Poverty Index. Multidimensional Poverty Index (MPI) is the function of quality education; health and household standard of living (UNDP, 2006). Therefore, the drive to conduct this study is motivated by the need to examine the impact of RUFIN programme on poverty reduction (MPI) in the State especially in aspects of rural literacy; health condition and their standard of living. The study hence explored the contributions of RUFIN in these regards and hopes to strengthen its services towards the promotion of rural household socio-economic well being through its financial services and projects delivering for the poverty reduction of these rural farmers' households who are cooperative members in Anambra state.

Objective of the Study

The broad objective of this study is to evaluate the contributions of RUFIN services to rural household poverty reduction in Anambra state.

The specific objectives are to:

- i. ascertain the RUFIN services (educational and technical support) rendered to the rural households;
- ii. determine the effect of RUFIN educational services rendered on rural household literacy level;
- iii. determine the effect of RUFIN technical support services on the rural household health conditions.
- iv. compare the rural households standard of living before and after accessing RUFIN services (credit services).

Hypotheses of the Study

H₀₁: RUFIN educational services rendered have no significant relationship to improved rural household literacy level.

H₀₂: The RUFIN technical support services rendered have no significant relationship with the rural household health conditions

H₀₃ Household heads access to credit services under the RUFIN programme have not significantly impacted on their standard of living

Review of Related Literature

Concept of Rural Finance

The term Rural Finance refers to the financial transactions related to both agricultural and non-agricultural activities that take place among households and institutions in rural areas. In some cases, rural finance has been wrongly equated with agricultural credit, based on the assumption that credit is the binding constraint to achieving project objectives related to agriculture. A more effective and comprehensive view of rural finance encompasses the full range of financial services that farmers and rural households require, not just credit.

According to Zakaree, (2014), rural financial services is about providing financial services such as secure savings, credit, financial transactions, money transfer services for remittance and insurance in rural areas. The ability of rural households to make long term investments to ensure time-patterned income flow is shaped by an economy's financial services. Despite the rapid development of financial services, majority of smallholders around the world, especially third world countries, remain without access to financial services that they need to improve their livelihoods. Despite the significant demand for financial services in rural areas, institutions offering financial services such as banks, credit unions, cooperatives, microfinance institutions (MFIs) or insurance companies are typically reluctant to serve in rural areas due to precarious nature of agricultural production (Egbetunde, 2012). As a result, the majority of the developing world's resource- poor households are bereft of financial access to the formal financial system. With this lack of access, households, farmers, as well as small rural entrepreneurs rely on costly source of accessing financial services especially through informal sources. Most loans from informal

sources, especially from money lenders are too expensive to be profitable, and debt can lead to permanent dependency of borrowers on money lenders and thereby entangling them in the vicious cycle of poverty (Egbetunde, 2012).

Thus, the overall financial sector development can be viewed as an important catalyst for economic growth and development for three reasons. These reasons according to (IADB, 2001) are, financial sector development ensures accelerated economic growth through efficient intermediation and risk management. Countries with developed financial markets with greater financial depth have high economic growth than the countries with less developed financial markets. Second, lack of adequate financial services hinder the formation of new enterprises and the modernization of existing ones. Third, improved financial intermediation could directly reduce vulnerability and reduce poverty. Microfinance, as a tool of rural financial services, has clear impact on poverty by positively affecting the household economic development, ensuring Income Generating Activities (IGA), sources of income, reducing vulnerability, housing tenure and enterprise growth.

Experience from Bangladesh shows that, formal financial institutions like government and private commercial banks, State-owned agricultural or rural development bank (for example, BRDP in Bangladesh), savings and loan cooperatives, microfinance banks, leasing, housing and consumer finance companies can offer a wide range of financial products. In between stand financial Non-government Organizations (NGOs), self-help groups, small cooperatives and credit unions. Formal services such as microfinance cannot replace loans from relatives, friends, and moneylenders but they do complement them and enable the liquidity constrained rural population to access a wider range of financial services. Rural finance emerged as a noble substitute for informal credit and is considered to be a powerful instrument for poverty reduction among people who are economically active but financially constrained (Murdoch and Haley, 2002). According to Eadgerwood, "Formal financial institutions are defined as those that are subject not only to general laws and regulations but also to specific banking regulations and supervision. Semi-formal institutions are those that are formal in the sense being registered entities subject to all relevant general laws, including commercial laws, but informal insofar as they are, with few exceptions, not under bank regulation and supervision. Informal providers (generally not referred to as institutions) are those to which neither special bank law or nor general commercial law applies, and whose operations are also informal so that disputes arising from contract with them often cannot be settled by recourse to the legal system"(Eadgerwood. 1999).

Rural finance has become a buzzword among development practitioners. The term rural finance' means providing very poor families with very small loans (microcredit) to help them engage in productive activities or develop their tiny businesses (The Microfinance Gateway, 2008).

According to the Consultative Group to Assist the Poor (CGAP), rural finance is the supply of loans, savings and other basic financial services to the poor, including working capital loans, consumer credit, pensions, insurance and money transfer services. Similarly, Hossain (2002) defines Rural Finance as, the practice of offering small, collateral-free loans to members of cooperatives who otherwise would not have access to the capital necessary to begin small business or other income-generating activities. The term ‘rural finance’ is often used in a much narrower sense, referring principally to microcredit delivered through NGOs for tiny informal business of micro-entrepreneurs (Christen et al. 2003). The term rural finance institution now refers to a wide range of organizations dedicated to providing these services like NGOs, credit unions, cooperatives, private commercial banks and parts of the state-owned banks, and non-bank financial institutions.

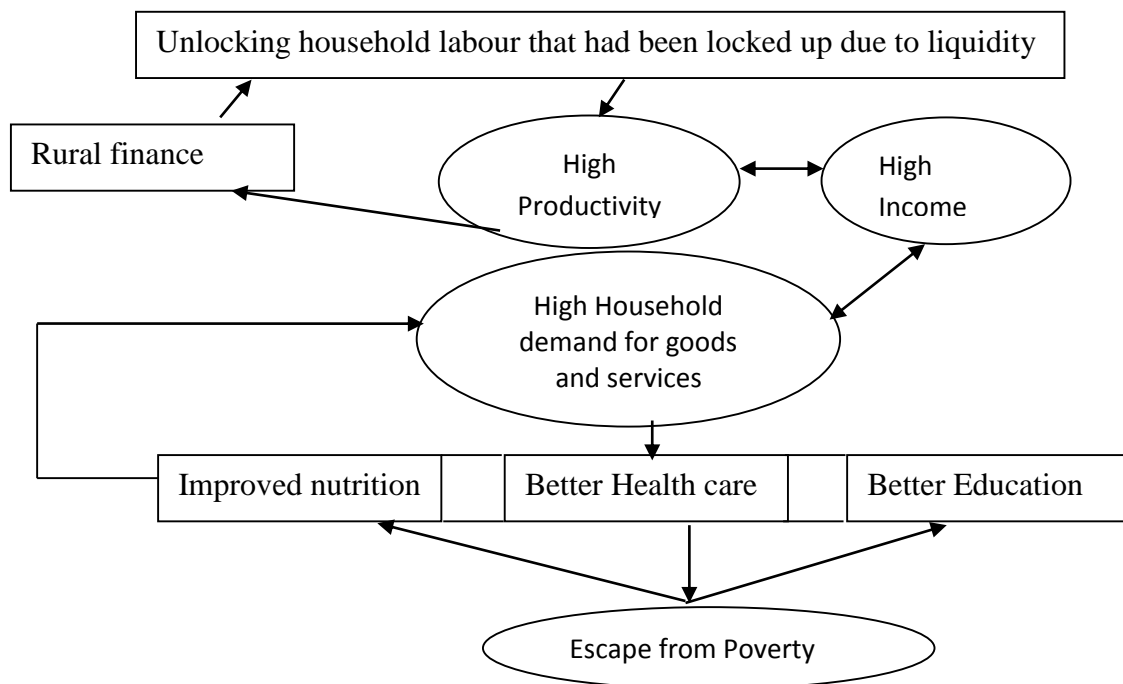


Figure 1: Impact of Rural Finance on Rural household poverty

Source: (Kiiru, 2012)

Materials and Methods

Anambra State is located between latitude 6⁰4S and 5⁰44N with annual average rainfall of 1800mm and 2000mm that distributed through March to November. The State is located in South East of Nigeria with Igbo ethnic majority. Anambra State occupies an average 4.416 square kilometers with 70percent arable land that are under cultivated, and there are 338721 farm families in Anambra State with an average size of eight persons per farm family or household (ASADEP cited in Ugabajah and

Ugumba, 2013). The State is situated on a fairly flat land with tropical vegetation. Agriculture is predominant occupation in the rural areas of the state engaging more than 70 percent of the rural population.

The study population comprises rural households of the entire registered and existing Farmers' Cooperative Societies (FMCS) that are clients and beneficiaries of IFADs Rural Finance Institutions (RUFIN) facilities in Anambra State. IFAD has 3 RUFIN sites in Anambra State which covers only 3 local government areas of the State. These include Aghamelum; Awka North and Orumba North LGAs. According to the information gotten from the Anambra ADPs office and Divisional Cooperative Officers in these LGAs, there are 680 groups (cooperatives) who are clients and have benefited from RUFINs activities in the State. These 680 groups (cooperatives) have membership strength of 14,612 farmers who are household heads.

Sample Size Determination and Sampling Procedure Techniques

The researcher adopted judgemental sampling technique and selected 30% (14,612) of the membership size of the 680 groups (cooperatives) for the study. Therefore, the 30% of 14,612 is 0.3 multiply by 14,612 which is equal to 4,383.6 members.

Taro Yamane was used to determine the concise respondents sample size.

$$4 = 366.55 \text{ approximately } 367$$

Thus, 367 copies of questionnaire were randomly distributed among 367 respondents (household heads) that cut across 680 groups (cooperatives) in 3 (Anyamelum; Awka North and Orumba North LGA) LGAs of the State. The respondents filled the questionnaire, the enumerators retrieved it from the respondents and submitted to the office of DCOs, while the DCOs collected these copies of questionnaire on behalf of the researcher. They were all correctly filled.

The researcher sourced for data from primary sources. Primary source consists of those first-hand information that are gotten directly by the researcher and this was sourced basically from the use of a structured questionnaire which was used extensively for this study.

The data gotten from the field were analysed with both descriptive and inferential statistics. The descriptive statistics was used to analyse the specific objectives (1 – 3). The descriptive tools that were used include frequency table, simple percentage, mean and five (5) point likert scale analysis with conventional mean of 3.0 that is any variable > 3.0 is negative while any ≤ 3.0 will be positive. The inferential statistics were used to test the formulated hypotheses. The T-test was used to test H_{01} , Pearson Correlation was used to test hypothesis two (H_{02}), while ANOVA was used to test hypothesis three (H_{03}).

Result And Discussion**Table 1: Distribution of Responses Based on RUFIN Services that are Accessible to Farmers in Anambra State**

S/N	RUFIN Services Indices	Mean	Decision
A	Educational Service Rendered		
i	Agric Extension service delivery	4.09	Accessible
ii	Adult education	3.88	Accessible
iii	Financial Empowerment training	3.60	Accessible
iv	Skills acquisition programmes	3.32	Accessible
v	Training on how to establish small scale business	3.44	Accessible
vi	Training on how to manage micro credit	3.19	Accessible
viii	Facilitates community Group formation	4.45	Accessible
ix	leadership development training	3.11	Accessible
B	Technical Support Services Rendered:		
x	Health sensitisation on household healthy living	3.69	Accessible
xi	Health care awareness campaign to rural households(farmers) on the family planning	3.08	Accessible
xii	Health care awareness campaign to rural households(farmers) malnutrition,	3.16	Accessible
xiii	Health care awareness campaign to rural households(farmers) HIV	3.41	Accessible
xiv	Health care awareness campaign to rural households(farmers) mortality	2.84	Not Accessible
xv	Health care awareness campaign to rural households(farmers) disease control	2.58	Not Accessible
xvi	Supply of farm inputs (fertilizer, pesticides; seedling etc)to farmers	3.87	Accessible
xvii	Facilitation of access to improved agricultural technologies	3.62	Accessible
xviii	Support on the use of farm machinery and equipments	3.24	Accessible
C	Credit Services Delivery:		
xix	Facilitates savings mobilization among rural households	4.37	Accessible
xx	Provision of Loan and credit facilities to households	4.58	Accessible
xxi	Pre loan training on credit utilisation	3.91	Accessible
xxii	Monitoring and supervision of credit utilization among households	2.53	Not Accessible
	Grand Mean (x)	3.580	Accessible

Source: Field survey Dec; 2021

The result in Table 1 was deduced from 5-point likert scale with threshold of 3.0. That is, the opinion of the respondents on the RUFIN services that are above the threshold of 3.0 was considered to be accessible to the rural household, while those responses that are below 3.0 were considered not accessible. As such, the result revealed that almost all the RUFIN services were accessible to the rural households except Health care awareness campaign to rural households (farmers) mortality (2.84); Health care awareness campaign to rural households (farmers) disease control (2.58); and Monitoring and supervision of credit utilization among households (2.53).

Meanwhile, the grand mean (x) score (3.580) shows that the majority of the RUFIN services were accessible. Some of the RUFIN services that are accessible include Agric Extension service delivery (4.09); Adult education (3.88); Financial Empowerment training (3.60); Facilitates community Group formation (4.45); Health sensitisation on household healthy living (3.69); Supply of farm inputs (fertilizer, pesticides; seedling etc) to farmers (3.87); Facilitation of access to improved agricultural technologies (3.62) Facilitates savings mobilization among rural households (4.37); as well as Provision of Loan and credit facilities to households (4.58).

In summary, the evidence from Table 1 revealed that RUFIN services are greatly accessible to many rural households but (RUFIN) still needs to do more on the aspect of monitoring and supervision of credit utilization among households and health care service delivery.

Result from Imai, Arun and Annim (2010) also affirms that services from MFIs, have significant positive effect of MFI productive loans on multidimensional welfare indicator.

Table 2: Distribution of Responses Based On the Influence of RUFIN Educational Services, on Rural Household Literacy Level.

S/NO	Literacy level Indices	Mean	Decision
I	All my boy children go to school	3.38	Great Extent
Ii	All my girl children go to school	3.04	Great Extent
Iii	All my children go to school	3.64	Great Extent
Iv	All my boy children finished primary school	3.59	Great Extent
V	All my girl children finished primary school	3.33	Great Extent
Vi	All my children finished primary school	3.49	Great Extent
Vii	All my boy children finished secondary school	3.81	Great Extent
Viii	All my girl children finished secondary school	3.27	Great Extent
Ix	All my children finished secondary school	3.63	Great Extent
X	I paid my boy children school fees regularly	3.08	Great Extent
Xi	I paid my girl children school fees regularly	3.17	Great Extent
Xii	I paid my all children school fees regularly	3.14	Great Extent
Xiii	My children school fees were not regularly paid	2.81	Low Extent
	Grand Mean (x)	3.273	Great Extent

Source: Field survey Dec; 2021

The result in Table 2 shows respondents responses based on the level of their household literacy which was deduced from scale analysis of five points with conventional mean of 3.0.

Result from the Table revealed that RUFIN educational services have greatly impacted (grand mean (x) = 3.273) on the rural household literacy. Based on this, evidence shows that the majority of the respondents agreed with most indicators (literacy level indices) except that most of them (rural household heads) don't pay the school fees of their children regularly as at when due.

With help of RUFIN educational services the rural households are able to improve the level of their education.

Result from their study Imai, Arun and Annim (2010) showed that there are significant positive effect of MFI productive loans on multidimensional welfare indicator.

Test of Hypothesis One (H₀₁)

H₀₁: RUFIN educational services rendered have no significant influence to improved rural household literacy level.

H_{A1}: RUFIN educational services rendered have significant influence to improved rural household literacy level.

In order to affirm or reject the hypothesis, data from Table 1 and 2 were subjected to one sample T test statistics and the result was presented in the Table 3.

Table 3: T test Statistics Result

	N	Mean	Std. Deviation	Std. Error Mean
services	13	2.236923E0	1.8752661	.5201052
literacy	13	3.336923E0	.2877900	.0798186

One-Sample Test

	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Services	4.301	12	.001	2.2369231	1.103711	3.370135
Literacy	41.806	12	.000	3.3369231	3.163013	3.510833

Interpretation

From the T test model statistics result, it can be deduced that RUFIN educational services has positive influence on the household literacy level. Therefore, the P- value (0.000) is less than the conventional 0.05, thus, the model is significant at 5% level of significance. As such, there is existence of enough evidence to reject the null hypothesis and conclude that RUFIN educational services rendered has significant influence to improved rural household literacy level.

Meanwhile, in order to strengthen and ascertain the T test statistics result the data was further subjected to Probability Plot Graph with Minitab statistical application. Therefore, evidence from the graph revealed that the distribution fits the data as a number of observations were made.

Decision:

Based on this evidence from the probability graph, the probability value is less than 0.05 at 5% level. This implied that the value is significant and further strengthen the T test statistics result in table 3. Therefore, the researcher affirmed that RUFIN educational services rendered have significant influence to improved rural household literacy level.

Table 4: Distribution of Responses on the Effects of Accessed RUFIN Technical Support Services on Household Health Condition

S/No	Household Health Indicator	Mean (\bar{X})	Decision
i.	None of my household is suffering from lack of balance diet related diseases e.g. kwashiorkor (malnutrition)	3.62	Effective
ii.	No HIV related diseases in my household	3.44	Effective
iii.	Any time my wife get pregnant i take her to antenatal	4.07	Effective
iv.	Facilitates malaria and other diseases control and treatment	3.84	Effective
v.	Me and my household agreed on the number of children to born (rural households family planning)	2.68	Not Effective
vi.	We consume healthy foods and fruits regularly	2.46	Not effective
Vii	The death rate in my house has reduced due to proper medical care	3.17	Effective
viii.	I now take my household (wife and children) to hospital when they are sick	3.29	Effective
ix.	I can buy medical drugs for my family any time they get sick	3.58	Effective
	Mean (\bar{X})	3.418 4	Effective

Source, Field Survey Dec., 2021

Table 4 results revealed that technical support services of RUFIN have effectively enhanced the rural households health conditions (Grand Mean (x) 3.4184). This was reflected in the aspect that none of the respondents’ household is suffering from lack of balance diet related disease e.g. kwashiorkor (malnutrition) (3.62); No HIV related diseases in my household (3.44); proper antenatal care (4.07); facilitates malaria and other diseases control and treatment (3.84); also the respondents are able to purchase medical drugs for their family any time they got sick (3.58).

As such, there are enough evidence to believe that there is a relationship between RUFIN and technical support services and household health conditions.

Result from their study Imai, Arun and Annim (2012) showed that there is significant positive effect of MFI productive loans on multidimensional welfare indicator.

Test of Hypothesis Two (H02)

H02: The RUFIN technical support services, rendered have no significant relationship with the rural household health conditions in Anambra State.

HA2: The RUFIN technical support services rendered have significant relationship with the rural household health conditions in Anambra State..

The above hypothesis statement was designed to examine the relationship between RUFIN technical support services rendered and household health condition. In order to examine that, Bivariate correlation model (*Pearson Correlation*) was used to determine the nature of relationship that does exist between the two variables (RUFIN technical support and household health condition).

Assumption

Pearson’s correlation coefficient assumes that each pair of variables is Bivariate normal. Use symmetric quantitative variables for Pearson’s coefficient and quantitative variables or variables with ordered categories for Spearman’s rho and Kendall’s tau-b.

Table 5: Correlations Test Result for technical and Household Health Conditions

		Technical support	Health indicator
Technical support	Pearson Correlation	1	.491
	Sig. (2-tailed)		.008
	Sum of Squares and Cross-products Covariance	1.388	.852
		.174	.107
	N	9	9
Health indicator	Pearson Correlation	.491	1
	Sig. (2-tailed)	.008	
	Sum of Squares and Cross-products Covariance	.852	2.169
		.107	.271
	N	9	9

The Bivariate Correlations procedure computes Pearson’s correlation coefficient, Spearman’s rho, and Kenedall’s tau-b with their significance levels. Correlations measures how variables or rank orders are related. Pearson’s correlation coefficient is a measure of linear association. Two variables can be perfectly related, Pearson’s correlation coefficient is an appropriate statistic for measuring variables association.

The Pearson’s correlation coefficient (0.008) is significant at the 0.05 level. These variables are positively correlated (0.91), and the correlation is significant at the 5% level of significance. Thus, there exist enough evidence to reject the null RUFIN technical services alternate; therefore, the researcher concludes that, the RUFIN

technical support service rendered has significant relationship with the rural household conditions.

In same vein, in order to affirm or make deduction based on the result of Pearson's Pearson's corrective coefficient the data was further subjected to another test (Probability Graph Plot).

Based on the evidence from the graphs the dots on both graphs form a straight line which indicates their linear relationship. A normal distribution with a mean of 3.2773 and 3.35 with a standard deviation of 0.4166 and 0.5207 appears to be significant at 5% level of significance. Since their p-value is less than 0.05. Thus, the researchers agreed with the result of Pearson's Correlation coefficient and concludes that the RUFIN technical support services rendered has significant relationship with the rural household health conditions.

Table 6: Distribution of Respondents Rate of Household Standard Of Living BEFORE Participating and Benefiting From the RUFIN Programme

	Household standard of living indices (Before)	Mean	Decision
i	Increase in the amount of money i make monthly (income)	2.74	Not okay
ii	Increase in the amount of money i keep monthly (savings)	2.61	Not okay
iii	Ability to pay and use power (electricity)	3.18	Okay
iv	Ability to buy fuel and power my house (generator)	3.05	Okay
v	household access to clean sanitary toilet	3.27	Okay
vi	household access to clean drinkable water	3.34	Okay
vii	Households access to Basic Life Enhancing Gadgets/ Assets e.g radio; telephone; TV, Etc	3.46	Okay
viii	Clean Household Floor	4.27	Okay
ix	My household use firewood sources of energy for household cooking	3.73	Okay
x	My household use kerosene stove sources of energy for household cooking	2.66	Not okay
xi	My household use gas sources of energy for household cooking	2.44	Not okay
xii	My household use charcoal sources of energy for household cooking	2.81	Not okay
	Mean (x)	3.13	Okay

Source: Field Survey Dec; 2021

Table 6 shows the result of household responses on the level of their standard of living before they participated and benefited from RUFIN programme. Evidence from the result table revealed that the rural household's standard of living were okay to an extent (grand mean (x) = 3.13) before they participated in the RUFIN programmes. Meanwhile, result shows that they (rural households) were not okay in some aspect of

their livelihood. These aspects include; monthly income (2.74); amount of money saved (2.61) as well as sources of energy for cooking.

Based on the field survey evidence, researcher agree that most of the respondents basic needs to sustain their standard of living were not fully met and satisfied before their participation in RUFIN programme.

Table 7: Distribution of Respondents Rate of Household Standard Of Living AFTER Participating and Benefiting From the RUFIN Programme

	Household standard of living indices (After)	Mean	Decision
i	Increase in the amount of money i make monthly (income)	3.87	Okay
ii	Increase in the amount of money i keep monthly (savings)	4.04	Okay
iii	Ability to pay and use power (electricity)	3.88	Okay
iv	Ability to buy fuel and power my house (generator)	3.64	Okay
v	household access to clean sanitary toilet	3.94	Okay
vi	household access to clean drinkable water	3.58	Okay
vii	Households access to Basic Life Enhancing Gadgets/ Assets e.g radio; telephone; TV, Etc	4.18	Okay
viii	Clean Household Floor	3.99	Okay
ix	My household use firewood sources of energy for household cooking	2.53	Okay
x	My household use kerosene stove sources of energy for household cooking	3.57	Okay
xi	My household use gas sources of energy for household cooking	3.75	Okay
xii	My household use charcoal sources of energy for household cooking	2.66	Okay
	Mean (x)	3.6358	Okay

Source: Field survey Dec; 2021

Table 7 showed the result of household responses on the level of their standard of living after they have participated and benefited from RUFIN programme. Evidence from the field survey revealed that the rural households' standard of living was okay (grand mean (x) = 3.6358) when compared to before their participation in the RUFIN programmes. Meanwhile, result shows that they (rural households) were okay in almost all aspect of their livelihood. These aspects include; monthly income (3.87); amount of money saved (4.04), as well as sources of energy for cooking (3.57).

Based on the field survey evidence before (Table 6) and after (Table 7) result were compared, the researcher agrees that most of the respondents (rural households) basic needs to enhance their standard of living were fully satisfied after their participation in RUFIN programme.

When comparing the before (Table 6) and after effect (Table 7) of RUFIN credit services on their standard of living, according to Alam (2008) result from his study on productivity growth of households with Graheem bank showed that there was an increase in income (standard of living) of rural households.

Test of Hypothesis Four (H03)

H03: Household heads access to credit services under the RUFIN programme have not significantly impacted on their standard of living

HA3: Household heads access to credit services under the RUFIN programme have significantly impacted on their standard of living

The hypothesis was subjected to Analysis of Variance test and the result was presented as follows.

Table 8:ANOVA

Livingstandard	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.573	5	.115	.285	.905
Within Groups	2.415	6	.402		
Total	2.987	11			

Interpreting the Results

In the ANOVA table , the p-value (0.004) for Carpet indicates that there is sufficient evidence that not all the means are equal when alpha is set at 0.05. To explore the differences among the means, examine the multiple comparison results.

Multiple comparison results are presented as a grouping table and a set of confidence intervals for the difference between pairs of means. Use the grouping information table to view, in a summarized format, groups of factor level means that are not significantly different. Levels that share a letter are not significantly different. Conversely, if they do not share a letter, the means are significantly different. Use the confidence intervals to determine a likely range for the difference between two means.

Decision

Based on the evidence presented above the researcher rejected the null hypothesis and accepted the alternate. That is, Household heads’ access to credit services under the RUFIN programme have significantly impacted on their standard of living.

Summary of Findings and Recommendations

That almost all the RUFIN services are accessible to the rural households except monitoring and supervision of credit utilization among households. The grand mean (x) of 3.580, showed that the majority of the RUFIN services are accessible to the rural households.

That, RUFIN educational services have greatly impacted (grand mean $(x) = 3.273$) positively on the rural household literacy. Based on this, evidence showed that the majority of the respondents agreed with most indicators (literacy level indices) except that most of them (rural household heads) didn't pay the school fees of their children regularly as at when due.

That, household level of standard of living is highly okay after they have participated and benefited from RUFIN programme. Evidence from the field survey revealed that the rural households standard of living was highly okay (grand mean $(x) = 3.6358$) when compared to before their participation in the RUFIN programmes. Based on the field survey evidence, researcher agreed that most of the respondents basic needs to sustain their standard of living were not fully met before their participation in RUFIN programme.

Recommendations

Poverty rate is one of the indicators for measuring how a nation is growing or developing and poverty is a major problem facing Africa with reference to Nigeria. Therefore, RUFIN is a programme designed to reduce poverty among rural households. As such in order to strengthen the services of the RUFIN so as to reduce rural households' poverty the following recommendations are made necessary;

Since RUFIN services are greatly accessible to many rural households, there is need to do more on the aspect of monitoring and supervision of credit utilization among households and health care service delivery. This will facilitate checks and balances which will make the rural households utilize the RUFIN services for productive purposes.

As a matter of urgency, RUFIN should collaborate and partner with other relevant institutions and agencies. This will enhance their service deliveries that are capable of reducing poverty among rural households.

In the same vein, IFAD should invest heavily in RUFIN in order to reduce poverty among the rural households. This will improve the quality of RUFIN services, as well as making the poverty reduction services more accessible to more rural households. Finally, in order to deliver poverty reduction services effectively to rural households, RUFIN urgently requires more extension staff. This will facilitate the accessibility of poverty reduction services to rural households.

Conclusion

Poverty in developing countries, particularly in rural areas amongst households has scaled in magnitude and indeed become a developmental challenge. In Anambra State, Nigeria, various programmes have been executed in the past in addressing the situation. The RUFIN intervention though at its pilot stage has shown promise based on the findings of the study. The positive response from 367 agricultural cooperative members who are household heads, on their accessing poverty reduction services and its effects on their household health (basic nutrition and child mortality); household

education (children's years of schooling and sustained attendance); and, living standards (economic assets, infrastructure); did prove the effects (efficacy) of the RUFIN programme as a poverty reduction programme in rural communities of Anambra State. However, serious efforts must be made towards addressing constraints to effectively deploying the programme in household poverty reduction. Identified challenges such as the inadequacy of funds; locational disadvantages of RUFIN offices; low investments and assets of the household heads; and, the weak level of education of the household heads should be addressed.

Importantly, the key thrust of RUFIN which is using the financial (savings, microcredit) and non-financial (training, information, monitoring and supervision) services to upgrade to economic assets (savings, credit, investment, income) of the household heads, so as to enable them provide for quality health is commended. These advancements, as revealed in the study affirmed the ability of the household heads to reduce their poverty, through improvement in the health, educational and the living standard of their families.

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INFLUENCE OF INTEGRATED MARKETING COMMUNICATION ON THE PROMOTION OF CONSUMPTION OF LOCALLY PRODUCED GOODS AMONGST UNDERGRADUATE STUDENTS IN SOUTH-SOUTH NIGERIA.

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Abstract

This study is centered on the Influence of Integrated Marketing Communication (IMC) on the consumption of locally made goods in the South-South region of Nigeria. This aims at finding out if advertising has the influence of changing consumers' attitudes from foreign product to locally made ones. The research was carried out in three private universities all within the region; namely, Igbinedion University Okada, Western Delta University, Oghara, Delta State, and Havillah University in Cross River State. In a survey method of research, 200 samples were randomly selected for the study hinged on media effect theory. Over sixty percent (60%) of respondents accepted the fact that the tools of Integrated Marketing Communication (IMC) in consonance with the objectives of the research have greatly influenced Nigerians, especially undergraduates in the South-South region on the consumption of locally made goods. The chi-square (χ^2) statical instrument was used in the analysis of data collected. From the SPSS result as shown above in table 16, χ^2 calculated is 136.480. At 5% level of Significance and 95% Confidence level, χ^2 tabulated at a Degree of Freedom of 2 is given as 5.991. This result is the significant. The researcher therefore made the following recommendations, that all integrated Marketing Communication (IMC) tools should be engaged and used optimally to ensure that majority of Nigerians become aware of the effect of their continued patronage of foreign made goods and that Government should not relent on enlightenment programme through radio and television until every citizen becomes proud of home made goods.

Keywords: Marketing Communication, Locally Made Goods, Advertising, Public Relation, Personal Selling

Introduction

Integrated Marketing Communication (IMC) is a concept that involves all tools of market promotion. This covers advertising, Public Relations, Sales Promotions, Direct marketing, email campaigns, personal setting and social media. In today's marketing environment, promotion involves Integrated Marketing Communication (IMC), involves bringing together a variety of different communication tools to deliver a common message and make a desired impact on customers' perception and behaviour.

The rising taste for the consumption of foreign goods has been a concern to many in Nigeria. The reason ranges from prestige to a quest for quality. It is ridiculous that recently, some packs of garri presumed to have been imported from India was discovered in a supermarket in Lagos. Yet, Nigeria is the highest world producer of cassava. Shobo (2017) disclosed that the attention of the Hon. Minister for Health was drawn to bags of Indian garri spotted in an unnamed supermarket in Ikoyi area of Lagos. Upon visitation to the supermarket, a 500mg packed garri without a NAFDAC registration number was discovered. The issue of concern to the Health Minister may have been the safety of the product to the Nigerian citizens. But a more serious issue is the reason behind the importation of a product available in abundance in Nigeria. This could be attributed to prestige, that is, the belief that anything imported from outside of the country is of a better quality.

It is disturbing that this nation imports virtually all the petroleum products used in the country, even when it is the highest producer of crude oil on continent of Africa. Nigeria Executive Industries Transparency Initiative (NEITI, 2021) states that Nigeria imported a total volume of 20.60 billion of Premium Motor Spirit (PMS) popularly known as petrol in 2019. This is in spite of the fact that Nigeria has four refineries, namely Warri refinery, Kaduna refinery and two refineries in Port Harcourt that have never operated to capacity.

Nigeria has the potentials to produce the basic food consumed locally and also exports to other countries because of its vast fertile land. But reverse is the case. Recently, President Muhammadu Buhari banned the importation rice and other allied products into the country to encourage local industries and farmers. It is a known fact that in any developing country, such as Nigeria, a sure way of killing local industries is to subject their products to compete with similar goods produced by technologically advanced countries. Economics as a subject teaches us that countries should engage in the production of goods it has economic advantage over others. This implies that it is a tragedy for any nation to depend on other countries for virtually all it consumes. Even where countries have quite similar climate and resources endowments, they may still find it advantageous to trade, that is to say that economically similar countries may carry on a large and thriving trade. The main reason lies in what is referred to as the economics of large scale production. Oyedeji et al (2017) opined that from the mid-1970s onwards; Nigeria's main trade policy instruments shifted markedly away from tariffs to quantitative import restrictions, particularly import prohibition and import licensing. The idea is to save its foreign reserve and by making Nigerians turn attention to the consumption of its local produce.

Iroegbu (The Nation, March 19, 2015) states that experts and operators in the manufacturing sector have identified consumers' lack of confidence in local items as being responsible for the sector's poor growth. No nation emerges a champion

overnight. Growth is a gradual process and therefore all Nigerians must shift their taste from foreign goods to patronize the local products for the general well-being of the nation's economy.

Integrated Marketing Communication (IMC) therefore, has been adjudged as having the capacity to grow and develop trade domestically and internationally. Integrated Marketing communication can be defined as the process used to unify marketing communication elements, such as public relations, social media, audience analytics, business development principles, and advertising, into a brand identity that remains consistent across distinct media channels.

Agbonifoh, et al 2017 observe that this practice causes great deficiency in the Nigerian manufacturing industries both in demand deficient and in structural form; while, Ogumbe et al (2001) cited in Isah 2017, lament that Nigeria loses its craftsmanship, local production, regression in exports, drawback in technology and finally poor economic growth, and in the long run, Africans (Nigerians in particular) become poor since people tend to ignore even their traditional techniques inherited from their forefathers in preference to foreign ones.

All the elements IMC have massively used in campaign for the consumption of locally made products as a way of contributing to economic growth and national development. All these policies will be ineffective unless the media inform and educate the masses on the need to comply with government, and attempt to produce what we need and develop interest in our local products. No doubt, the mass media remain the main tool of IMC with it carries out the campaigns of mobilizing people at all levels on the need to patronize locally made goods. This they through documentary programmes, radio/television jingles, news features and editorials. Wallace (2006) asserts that mass media play a significant role in the education policy process, yet this contribution has received little attention in empirical and theoretical analysis. Convergence between theoretical work on education policy and media studies, in linking social institutions with the economy in the perpetuation of social inequalities, while accepting their relative autonomy, provides a starting point for incorporation of media role in conceptualization of the education policy process in all its entirety. No matter how one looks at it, mass media which is the major tool of IMC possess the potency to change people's attitude and taste. Lyons (2021) your marketing strategies determine how your food (products) are presented. When you lack cohesion amongst your marketing teams, it is as if someone took all that tasty food and threw it into a fridge.

Statement of Problem

Despite several measures taken by the government to promote the attitude of Nigerians to patronize locally made goods, quest for consumption of foreign goods is

still very high due to the government method of promotion. Government should employ the services of advertising agencies, public relations consultants as well as personal selling for effective and desired result. Expectedly, government policies and legislation in promoting consumption of locally made goods such as import restrictions, total ban on some products and increase in tariffs, should have been able to dissuade the craze for the consumption of foreign goods; but this is from the case. There have been extant works done on these variables but there is no known, literature review on Integrated Marketing Communication (IMC) in the study area. This study is therefore, necessitated to look at how these dimensions of Integrated Marketing Communication (IMC) (advertising, Public Relations, Sales Promotions, Direct marketing, email campaigns, personal setting and social media) affect patronage of locally made goods by the undergraduate students in South-South Nigeria. Hence the need for this study.

Objectives of the Study

The objectives of the study were to:

1. Ascertain the influence of advertising on consumption of locally made goods by undergraduate students of the South- South region of Nigeria.
2. Determine how Public Relations influences undergraduate students' consumptions of the locally made goods.
3. Examine the influence of personal selling on undergraduate students' consumption of locally made goods in the South- South region of Nigeria.

Research Questions

1. Does advertising have any influence on undergraduate students' consumption of locally made good in the South- South region of Nigeria?
2. Does Public Relations have any influence on undergraduate students' consumption of locally produced goods in the South- South region of Nigeria?
3. Does Personal selling have any influence on undergraduates' consumption of locally made good in the South-South region of Nigeria?

Hypothesis

H₀ Advertising as a tool of IMC has no significant influence on undergraduate students' consumption of locally made goods in the South-South region of Nigeria.

Conceptual Review

Integrated Marketing Communication: Marketers invest in various media platforms to influence consumer behaviour (CB). Communication on every media platform has a different composition that engages the consumers in a distinct way. In this regard, to integrated marketing communication government and its agencies deploy advertisement in form of advertorial, radio and television jingles to influence public attitude. Odoemelam, Okika, Wilson & Odoemelam (2020) expressed that the

awareness, perception and attitudes held by stakeholders towards an organization needs to be understood, shaped and acted upon. Truly, the major function of advertising is to create awareness about the existence of a brand and as well, create a positive image for the brand. In this case, government agencies in their bid to promote the consumption of locally made goods should try to create awareness about alternative local products available. The big question is, are Nigerians really interested in trying the alternative products made locally. A poll conducted in 2016 in Abuja which sought the opinion of people on Nigerians' aptitude and preference for locally made products also showed that 59 per cent of respondents say they buy locally made goods very often.

Concept of Advertising

Advertising is a marketing tactic involving paying for space to promote a product, service or cause. The actual promotional messages are called advertisements or ads for short. The goal of advertising is to reach people most likely to be willing to pay for a company's products or services and entice them to buy. Azuka (2022) when trying to zero in on the types of people who are more likely to need or want your goods or services and be willing to shell out hard-earned cash for it you might look at demographic characteristics, such as gender, age, education level, income and zip code.

Concept of Public Relations

Public Relations are a concept that seeks to create a deliberate and sustained understanding between an organization and the organizations in various publics. Nwosu (2015) states that Public relations deal both with the external and the internal publics. The external public includes all potential customers, stake holders and the mass media, while the internal public involves the staff and all within the organization.

Concept of Personal Selling

Personal selling is another tool of the Integrated Marketing Communication. It involves direct contact between the seller and the buyer. The seller personally employs the use of word-of-mouth to convince his/her potential buyer to invest in his/her product or her services.

Promotion of Consumption

The rising taste for the consumption of foreign goods has been a concern to many in Nigeria. The reason ranges from prestige to a quest for quality. It is ridiculous that recently, some packs of garri presumed to have been imported from India was discovered in a supermarket in Lagos. Yet, Nigeria is the highest world producer of cassava. Shobo (2017) disclosed that the attention of the Hon. Minister for Health was drawn to bags of Indian garri spotted in an unnamed supermarket in Ikoyi area of Lagos. Upon visitation to the supermarket, a 500mg packed garri without a NAFDAC

registration number was discovered. The issue of concern to the Health Minister may have been the safety of the product to the Nigerian citizens. But a more serious issue is the reason behind the importation of a product available in abundance in Nigeria. This could be attributed to prestige, that is, the belief that anything imported from outside of the country is of a better quality.

Public relations can be used to encourage the purchase of locally produced goods. It describes the range of actions taken by an organization to enhance and safeguard the public's perception of the organization, its policies, and its products. It is a conscious effort to foster communication between a company and its numerous audiences. A nephew of Sigmund Freud, Edward Bernays is sometimes described to as the professional first theorist and the father of public relations for his work in the 1920s. According to him, audiences needed to be carefully comprehended and convinced to view things from the clients' perspective. Public Relations operates at five distinct areas viz: Image-Making, Event management, Media relations, Community relations and Crisis management. The study reviewed some of the Public Relations (activities) roles.

Locally Made Goods

It is disturbing that this nation imports virtually all the petroleum products used in the country, even when it is the highest producer of crude oil on continent of Africa. Nigeria Executive Industries Transparency Initiative (NEITI, 2021) states that Nigeria imported a total volume of 20.60 billion of Premium Motor Spirit (PMS) popularly known as petrol in 2019. This is in spite of the fact that Nigeria has four refineries, namely Warri refinery, Kaduna refinery and two refineries in Port Harcourt that have never operated to capacity. Nigeria has the potentials to produce the basic food consumed locally and also exports to other countries because of its vast fertile land. But reverse is the case. Recently, President Muhammadu Buhari banned the importation rice and other allied products into the country to encourage local industries and farmers. It is a known fact that in any developing country, such as Nigeria, a sure way of killing local industries is to subject their products to compete with similar goods produced by technologically advanced countries. Economics as a subject teaches us that countries should engage in the production of goods it has economic advantage over others. This implies that it is a tragedy for any nation to depend on other countries for virtually all it consumes.

Without doubt, Personal Selling as one of the tools can be used to promote the consumption of the locally made goods in Nigeria. It is also known as face-to-face selling. This tool has to do with one person who is the salesman trying to convince the customer to buy a product. It is a promotional method by which the salesperson uses his or her skills and abilities in an attempt to make a sale.

It is an interpersonal, face-to-face interaction for the purpose of creating, modifying, exploiting or maintaining a mutually beneficial exchange relationship. It involves direct face-to-face contact and thus the only promotional tool that can encourage and make use of on-the-spot consumer reaction. Personal selling is the process of assisting and / or persuading a prospective customer to buy a product or service or to act favorably upon an idea that has commercial significance to the seller (Donaldson, 1995; Agbonifoh et al., 2002).

Donaldson (1995) opined that the role of personal selling has two interrelated function - information and persuasion. The information role is part of a two-way process whereby information about the company's product or offer needs to be communicated to existing and potential customers and, in the reverse direction, customers' needs are correctly interpreted and understood by management. Salespersons impart knowledge about the product or service which provides benefits to customers and also a range of information on promotional support, finance, technical advice, service and other elements which contribute to customer satisfaction. Salespersons are also the face-to-face contact between purchasers and the company and for good reason are referred to as the eyes and ears of the organization.

The second role of personal selling is the persuasive nature of personal selling. Identifying customers' needs and market opportunities can never be overstated. Nevertheless, in competitive markets (manufacturing industry) prospective customers are usually faced with an abundance of choice. Customers/purchasers will have to be convinced that their needs have been correctly identified by the company and that the offer provides benefits over any other firm. Personal selling remains an essential marketing tool in convincing customers to patronize a firm's offering. Personal selling plays a key role in the marketplace and for the organization.

Undergraduates

Nigerian undergraduates' have the propensity for the consumption of foreign goods on the pretext that whatever that is foreign is of high quality. When compared to items from developing nations, students tend to identify products from developed countries with a strong brand image and quality that will elevate the status of customers, according to prior empirical findings. This is seen in their dressing and acquisition of other personal properties.

Prior empirical evidence suggests a general consensus that undergraduates associate products from developed countries with a strong brand image and quality that will raise the status of buyers, in comparison with products from developing countries. For example, products from Germany and Switzerland are favored over products from Surinam and Myanmar, Kotler and Gertner, (2002); US products are considered higher quality than Mexican products (Chao, 1998; Thakor and Katsanis, 1997);

Japanese products are perceived as superior to those from Poland and Hungary (Nebenzahl and Jaffe, 1996); and automotive products from Japan are evaluated higher than those from Korea, Mexico, or the Philippines (Johansson and Nebenzahl, 1986). According to the discussion above, this article is predicated on the idea that undergraduate students in Nigeria's South-South region will purchase locally produced goods when they want non-exclusively cheap items and imported goods from developed nations when they want quality items regardless of price.

Effect of Integrated Marketing Communication on the Promotion of the Consumption of Locally Made Goods.

The study demonstrates that a number of dependent and independent variables have an impact on direct marketing, personal selling, public relations, and advertising. One factor, specifically sales promotion, has no bearing on consumers' intentions to make a buy. The results of the data are substantial. Overall, the association between the dependent variable above and the variable measuring purchase intention number 12 is favorable. By distributing questionnaires to as many as 307 respondents, this study gathered data. The study's findings can serve as a manual for other researchers and standards for upcoming businesses. It is clear from the studies of a number of variables that these variables significantly affect consumers' intentions to make purchases. The following are some of the variables that influence integrated marketing communication's encouragement of buying locally created goods are: (1) Advertising significantly influences consumers' intentions to make purchases. This is so that the general public is informed about the goods that are being offered through advertising. Social media and mainstream media are used to distribute advertisements so that consumers may learn more about the provided products. Additionally, marketing can be employed by the business to communicate with its clients. 2) Sales marketing, which significantly affects consumers' intentions to buy. Customers are drawn in by the variety of sales promos available. To entice clients to buy their items, for instance, numerous businesses employ discount techniques, free coupons, and buy one get one deals. This is backed by the fact that the public finds the tactic of charging a high price and then offering a discount more appealing than charging the usual price but offering no reduction. (3). Direct selling Purchase intention is significantly impacted by direct marketing. In reality, direct marketing resembles a company's response to its clients on social media, which frequently happens. Such is employees who help clients who need assistance when making purchases from fast fashion retailers, whether they be online or offline. The public finds this method to be highly appealing since they see direct marketing to be helpful. Despite the fact that the value of public relations in influencing purchase intention is less than its major worth, research based on respondent data indicates otherwise. Therefore, it can be said that elements related to public relations have no bearing on consumers' intentions to buy foreign goods. This can be as a result of the business's poor customer PR management. The way the business branded its name and trained current workers to work on the internet website

and offline store are examples of how public relations were delivered. This outcome indicates that public relations for Indonesian fast fashion need to be further enhanced. similar to responding quickly to customers that need help. Train all employees to assist consumers if they need assistance.

Theoretical Framework

Media Effects Theories

Media effect theory was propounded in 1960 by an American professor called Mc'luhan. He postulates that media serve the functions of surveillance correlation, entertainment and cultural transmission. The theory expressed the widespread fear that messages could outweigh other establishing cultural influences such as family and community. It also established that the mass media depends on the society for their survival, while the society depends on the mass media for their information. This symbiotic relationship has therefore, informs its choice for this research work.

Early media studies focused on the use of mass media in propaganda and persuasion. However, journalists and researchers soon looked to behavioral sciences to help figure out the effect of mass media and communications on society. Scholars have developed many different approaches and theories to figure this out. You can refer to these theories as you research and consider the media's effect on culture.

The belief that mass-media messages possess the potency of destabilizing other cultural influences, such as family and community, led to what is known as the direct effects model of media studies. This model assumed that audiences passively accepted media messages and would exhibit predictable reactions in response to those messages. Therefore, media effect theory is found most appropriate for this study, so, weaving the research around it will show clearly how the various tools of IMC which invariably use the mass media have been able to influence Nigerians taste to consume locally made products.

Methodology

The study adopts the survey design method. The population of this study involves all the undergraduate students residents in the South-South Region of Nigeria, irrespective of their nationality. Since the idea behind the study is to see how the tools of Integrated Marketing Communication have been able to influence the taste of undergraduate students towards the consumption of locally made goods, the inclusion of other nationals who are resident in Nigeria is critical since their number is quite significant, so their taste and ultimate consumption of locally made goods will give boost the economy. For purposes of this study, 200 sample is randomly selected. The sample is drawn from 100 students were selected from among the students of Igbinedion University, Okada, Edo State, 50 students was selected from Western Delta University, Delta State and 50 students from Havillah University, Cross River

State. This sample was believed to represent all the characteristics in the entire population.

Data Presentation and Discussion

Hypotheses

The hypotheses to be tested in this study are stated in the null (H₀). In testing the hypotheses, the researcher will make use of the chi-square analysis.

Decision Rule: Reject Null Hypothesis (H₀) if X² calculated is higher than X² tabulated and accept Null Hypothesis (H₀) if X² calculated is lower than X² tabulated.

Hypothesis 1: Advertising as a tool of IMC has no influence on the taste of Nigerians towards the consumption of foreign goods to locally made ones.

To test for the hypothesis, the response in table 4.7 was subjected to chi-square analysis using the SPSS. The result of the chi-square analysis is presented below;

Table 4.19: Chi – Square Test Analysis

	Media communication and influencing taste for foreign goods
Chi-Square	214.080 ^a
Df	3
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

From the chi-square test statistics, it will be observed that chi-square calculated is 214.080

Decision: From the SPSS result as shown above in table 16, X² calculated is 214.080. At 5% level of Significance and 95% Confidence level, X² tabulated at a Degree of Freedom of 3 is given as 7.815 (see Appendix II).

A look at both the chi-square calculated and tabulated comparatively as shown in table 4.19, reveals that chi-square calculated is higher than chi-square tabulated. Therefore, the decision rule is to reject the null hypothesis and accept the alternate hypothesis. Subsequently, result of the analysis reveals that advertising as a tool of IMC has an influence on the taste of Nigerians towards the consumption of foreign goods to locally made ones.

Hypothesis 2: Import restrictions have no influence on local production and consumption.

To test for the hypothesis, the response in table 4.14 was subjected to chi-square analysis using the SPSS. The result of the chi-square analysis is presented below;

Table 4.20: Chi – Square Test Analysis

	Media communication and influencing taste for foreign goods
Chi-Square	167.840 ^a
Df	3
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

From the chi-square test statistics, it will be observed that chi–square calculated is 167.840

Decision: From the SPSS result as shown above in table 16, X^2 calculated is 167.840. At 5% level of Significance and 95% Confidence level, X^2 tabulated at a Degree of Freedom of 3 is given as 7.815 (see Appendix II).

A look at both the chi-square calculated and tabulated comparatively as shown in table 4.20, reveals that chi-square calculated is higher than chi-square tabulated. Therefore, the decision rule is to reject the null hypothesis and accept the alternate hypothesis. Subsequently, result of the analysis reveals that import restrictions have an influence on local production and consumption.

Hypothesis 3: Word of mouth has no influence in the consumption of locally made goods.

To test for the hypothesis, the response in table 4.8 was subjected to chi-square analysis using the SPSS. The result of the chi-square analysis is presented below;

Table 4.21: Chi – Square Test Analysis

	Media communication and influencing taste for foreign goods
Chi-Square	136.480 ^a
Df	2
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

From the chi-square test statistics, it will be observed that chi–square calculated is 136.480

Decision: From the SPSS result as shown above in table 16, X^2 calculated is 136.480. At 5% level of Significance and 95% Confidence level, X^2 tabulated at a Degree of Freedom of 2 is given as 5.991 (see Appendix II).

A look at both the chi-square calculated and tabulated comparatively as shown in table 4.21, reveals that chi-square calculated is higher than chi-square tabulated. Therefore, the decision rule is to reject the null hypothesis and accept the alternate hypothesis. Subsequently, result of the analysis reveals that word of mouth has an influence in the consumption of locally made goods.

Conclusion/ Recommendations

This study has revealed that the influence of Integrated Marketing Communication (IMC) on consumption of locally made goods cannot be overemphasized. IMC and its tools play a major role in causing attitudinal changes towards the consumption of locally made products.

Based on the above the following are recommended to ensure continuous patronage of locally made products by Nigerians

1. All the IMC tools should be engaged and used optimally to ensure that majority of Nigerians are aware of the effect of their continued patronage of foreign goods.
2. Government shouldn't relent on Enlightenment programs through radio and television until every Nigerian becomes proud of home made goods
3. Those involved in local production have to change their perception from making profits at all cost to quality production.

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TOTAL ECONOMIC RECOVERY THROUGH CO-OPERATIVE SUSTAINABILITY

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Abstract

This paper evaluates total economic recovery through cooperative sustainability. The aim is to investigate the ways in which cooperatives can act as agents towards sustainable community development. The paper is a descriptive survey, which involves the collection of data for the purpose of describing the role of cooperative societies in economic development. The paper posits that for over 160 years now cooperatives have been an effective way for people to exert control over their economic livelihoods as they play an increasingly important role in facilitating job creation, economic growth and social development. The paper concludes that to be effective and successful, cooperatives must continuously achieve two inter-related goals: enhance viability and improve ability to service its members; and remain an economically viable, innovative and competitive enterprise. The study recommends that government should give maximum financial and non-financial supports to cooperative societies to enhance sustainability.

Keywords: *Cooperative, Sustainability, Economic, Recovery, Development.*

Introduction

Currently, in this era when many people feel incapable to change their lives, cooperatives represent a strong, vibrant, and viable economic alternative. Cooperatives are enterprises created by and for people to serve their members' economic and social needs. Based on values such as self-help, democracy, equality, and solidarity, and guided by principles inspired by those values, cooperatives focus on long-term goals for the greater good, rather than short-term profits for a few. Through a cooperative, disadvantaged people can create their own economic opportunities, participate in decision-making processes that concern them, and turn individual risk into collective risk (Abell, 2021).

As governments around the world cut services and withdraw from regulating markets, cooperatives are being considered useful mechanisms to manage risk for members in Agricultural or other similar cooperatives, help salary/wage earners save for the future through a soft-felt monthly contribution that is deducted from source, own what might be difficult for individuals to own by their efforts, strengthen the communities in which they operate through job provision and payment of local taxes. Cooperatives generally provide an economic boost to the community as well.

Incidentally, cooperative despite its old age is not very popular in Nigeria. Only recently worker cooperatives started gaining ground among working class citizens, most of who find it difficult to save part of their salaries/wages for the rainy day.

Hitherto, cooperative societies were thought to be associations meant only for farmers, small traders and other very low-income earners. This explains why quite a number of cooperative farmers are found, particularly in southern Nigeria (Encarta, 2015).

The problem is that many people do not know much about cooperative, its mechanisms and role in economic development, and how it is considered in the world as a *Third Force*, an alternative and countervailing power to both big business and big government.

Cooperatives operate very much like other businesses. They must serve a market efficiently and effectively, they must be well managed, and they must survive financially. However, there are important distinctions that make cooperatives unique. Birchall (2021) examines the difference between cooperatives and other businesses in relation to three main groups of people responsible for bringing them into existence and keeping them in operation. The three groups are: the persons who own them (the shareholders, the investors), the persons who control them (the effective decision makers) and the persons who use them (the customers). According to him, in typical capitalist business, especially large enterprise and multinational corporations, these three are separate and distinct groups. In small private business the situation is generally much better because of the close connection between shareholders (investors) and control. In a small retail business, for example, the first two components are often identical. But still the users, the customers, are a separate group. In a cooperative, all three come together to form a unity; those who own, those who control, and those who use are one.

Concept of Cooperative and Economic Recovery

Birchall (2020) defines co-operatives as “an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise”. They are governed by a set of principles including voluntary and open membership, democratic member control, economic participation on the basis of membership rather than size of investment, autonomy and independence, a commitment to the education and training of their members, a commitment to co-operative with other co-operatives and a responsibility for the wider community. Behind these principles are values such as self-help, equity, democracy, equality among members, and solidarity (Birchall, 2020).

Co-operatives are not a panacea to solve all the ill-effects of global capitalism; however, co-operative model offers a structure of governance that is better suited to an economy that aims for sustainable wellbeing and prosperity rather than growth for growth's sake.

The market economy model implies that society is best off when firms maximise profits, thus contributing to economic growth. As we have already seen, there are plenty of reasons why we should not expect the pursuit of economic growth to lead in any straightforward way to greater human wellbeing. We need to move towards an economy

in which broader measures of social progress and benefit are considered, and co-operatives enable exactly this.

The Role of Cooperatives in Economic Development

Cooperatives are community-based, rooted in democracy, flexible, and have participatory involvement, which makes them well suited for economic development (Gertler, 2014). The process of developing and sustaining a cooperative involves the processes of developing and promoting community spirit, identity and social organisation as cooperatives play an increasingly important role worldwide in poverty reduction, facilitating job creation, economic growth and social development (Gibson, 2015).

Cooperatives are viewed as important tools for improving the living and working conditions of both women and men. Since the users of the services they provide owned them, cooperatives make decisions that balance the need for profitability with the welfare of their members and the community, which they serve. As cooperatives foster economies of scope and scale, they increase the bargaining power of their members providing them, among others benefits, higher income and social protection.

Hence, cooperatives accord members opportunity, protection and empowerment - essential elements in uplifting them from degradation and poverty (Somavia, 2002).

As governments around the world cut services and withdraw from regulating markets, cooperatives are being considered useful mechanisms to manage risk for members and keep markets efficient (Henehan, 1997).

In a number of ways, cooperatives play important role in global and national economic and social development. With regard to economic and social development, cooperatives promote the “fullest participation of all people” and facilitate a more equitable distribution of the benefits of globalization. They contribute to sustainable human development and have an important role to play in combating social exclusion.

Thus the promotion of cooperatives should be considered as one of the pillars of national and international economic and social development (Crane and Matten, 2017).

In addition to the direct benefits they provide to members, cooperatives strengthen the communities in which they operate. According to Somavia (2002) cooperatives are specifically seen as significant tools for the creation of decent jobs and for the mobilization of resources for income generation. Many cooperatives provide jobs and pay local taxes because they operate in specific geographical regions. According to Wikipedia (2006) and Levin (2002) it is estimated that cooperatives employ more than 100 million men and women worldwide.

In Nigeria, cooperatives can provide locally needed services, employment, circulate money locally and contribute to a sense of community or social cohesion. They can provide their employees with the opportunities to upgrade their skills through workshops and courses and offer youth in their base communities short and long-term employment positions. Students could also be employed on casual-appointment basis during long vacations. Through these, cooperatives will contribute to economic development.

Cooperative Sustainability

Sustainability means meeting our needs without compromising the ability of future generations to respond to their needs (Kuhlman and Farrington, 2010). The concept of cooperative sustainable includes narrowing the gaps between rich and developing countries because of these deficiencies or weaknesses if not reduced or closed will cause more problems in the society instead of leading to economic development in a country. Achieving cooperative sustainability in Nigeria is to establish an economy that is viable, environmentally sound and socially responsible. The concept of cooperative sustainability has been there for years, and it was initially seen as an operational concern, consisting of mostly defensive efforts to reduce poverty and cut waste (Yvonet al., 2011).

Effect of Cooperative on Poverty Alleviation

Co-operatives are structured so as to serve the needs of their members, not just to return profits to them. In effect, the economic relationship between a consumer co-op and its members is different from that of a retailer and a consumer; and the relationship between a worker co-op and a worker-member is different from that of a firm to its employees. As Arild Vatn and others have shown (Vatn, 2006), the contexts with which one engages people affects their preferences -we are only self-interested rational economic profit maximisers if we are engaged in contexts where that is the expected behaviour. In a co-operative, the motivations are often broader.

Co-operatives exist to benefit their members, with 'benefit' being widely defined. In some cases, it may mean providing work; in others it may be providing a service or good that doesn't otherwise exist and in others it may be providing the best possible price for its members needs or goods. This broad definition stands in stark contrast to publicly traded corporations; the purpose of co-operatives cannot be distilled into a single end (i.e. the maximisation profit). Crane and Matten (2017) provide concrete examples of different purposes of co-operatives:

- Retail co-operatives are set up to meet retailing needs: e.g. in remote parts of Nigeria consumers founded the multipurpose cooperative societies to provide them with shopping facilities. Also most banks were initially founded to supply its members with capital.
- Producer co-operatives are set up to meet production need: e.g. many agricultural co-operatives were founded to share tools, supplies, and know how.
- Purchasing co-operatives were set up to meet buying needs: e.g. These are co-operative of small companies in the roof-laying industry that use co-operation to increase purchasing power.

Theoretical Framework

This study is anchored on the "Collective Action Theory".

Marshall (1988) defined collective action as an action taken by a group (either directly or on its behalf through an organization) in pursuit of members' perceived shared interests. Members can contribute in various ways to achieve the shared goal: money, labour or in-

kind contributions (food, wood). The action can take place directly by members of a group, or on their behalf by a representative or even employee. The coordination can take place through a formal organization, through an informal organization, or, in some cases, through spontaneous action. Thus, an organization may contribute to collective action, but the two concepts are not the same. In the context of natural resource management, the collective action of deciding on and observing rules for use or non-use of a resource can take place through common property regimes or by coordinating activities across individual farms. Three major tenets of collective action are that (1) It requires the involvement of a group of people; (2) it requires a shared interest within the group; and (3) it involves some kind of common action which works in pursuit of that shared interest.

- The nature of cooperative society is easily explained by the social action theory. Cooperatives are made up of individual who through a combination of resources are able to confront and overcome several socio-economic challenges confronting them. Putnam's (2016) three components of social action as explained above appears to be the essential values on which cooperative societies thrive on and which to a large extent determine their success. Clearly, the collective action theory is relevant to this study since it enhances our understanding of the cooperative as a self-help organization that depends on member contribution, commitment and participation for its success.

Empirical Review

Effiom 2014 investigated the Impact of Cooperative Societies in National Development and the Nigerian Economy with the aim of examining the social and economic impact of cooperative societies in Nigeria and to investigate into their origin, history, formation and development. Also to be examined is their impact in our rural communities, especially in the grass root, urban and national development. It has been argued that commercial financial institutions such as banks and insurance companies could play greater roles in the advancement of rural development than the cooperative societies. This is so because of the enormous contribution of these financial houses to the rapid, social and economic development of the people, and urbanization. The paper further reviews the various obstacles and challenges confronting the effective performance of cooperative societies in Nigeria, and proffer ways of forestalling these problems. The paper is of the view that as many as these societies may be in form, formation and groups, with their various tags, aims and objectives, government should aid and encourage these organizations to enable them stand and perform effectively since they are all contributed to factors in the economic development and growth of Nigeria.

Stephen and IZA 2013 investigated Cooperatives in a Global Economy: Key Economic Issues, Recent Trends, and Potential for Development. In their paper, they examine major trends and potential for cooperatives in the context of four prominent socio-economic issues: the lack of jobs, economic and social inequality, educational mobility, and the priority need for innovations. We present recent data on the amount and types of job creation in cooperatives. We consider co-ops in light of the recent financial and economic

crises. Finally, we offer some observations on cooperatives and innovation, and some perspectives on the outlook going forward.

Gap in literature

The review concludes that the existing knowledge on the Total Economic Recovery Through Co-Operative Sustainability are more of detailed information when referring to regions like the core North, and other country etc. On the other hand, activities of Cooperative in Nigeria does not offer detailed information to the grassroots level at which greater understanding is required to help increase the proficiency of Cooperative and its sustainability when referring to economic recovery. This gap needs to be filled to make progress in enhancing activities of Cooperative and their influence to the grassroots level. There is dire need to understand and appreciate influence of cooperative and their contribution to the various aspect of the economy and its appropriate integration in all the facets of the society in Nigeria. However, there are limited studies to the best of the researchers' knowledge on total Economic recovery through Co-Operative sustainability. As such, this creates a vacuum that needs to be filled, hence this careful study and research. Emphatically, the result of this study will be able to fill the vacuum hence, making this a more appreciated field and a worthy venture for both rural and urban dwellers.

Methodology

The method consisted of four Phases. The first step was to identify the key concepts underpinning economic recovery and cooperative sustainability. Second, these concepts were compared with the co-operative principles to evaluate whether the co-operative principles could be used as a proxy for sustainability. Third, samples of co-operatives were compiled. Fourth, the websites and annual reports were analyzed for the key sustainability concepts. This effort was supplemented by 'crowd-sourcing' examples of co-operatives that are leaders on sustainability.

Table 1. Spread in poverty Levels in Nigeria

Urban	Rural	No Education	Primary Education	Secondary Education	Tertiary Education
43.7	56.3	68.7	48.7	44.3	26.3

Source: NBS, 2022

COOPERATIVES PRINCIPLE	SUSTAINABILITY			ECONOMIC RECOVERY		
	Count	Slope	Sources	Count	Slope	Sources
Cooperation	87	<0.05	48%	55	<0.05	30%
Working together	5	<0.05	6%	4	<0.05	4%

Coordination	28	<0.05	32%	8	<0.05	30%
Partnership	88	<0.09	42%	59	<0.09	50%
Levels (of government)	8	<0.05	12%	6	<0.05	15%
Networks	270	1.00	60%	136	1.00	40%

Table 2. Sustainability and Economic recovery

Source: ICA, Cooperative Work for Sustainable Development, 2022

Conclusion

A cooperative is a unique form of business used by people and businesses for their mutual benefit. Regardless of its purpose or membership, starting a cooperative requires considerable time, energy, commitment, and technical resources. Recognition of a common need is fundamental to the formation and successful operation of a cooperative. Potential members must devote much time and energy to developing their new business. A cooperative requires member commitment to finance and use the business and select knowledgeable directors who hire a competent manager. A strategic business plan is important to harmonize all of the elements for the cooperative's success.

In order to achieve their maximum strength and effectiveness, cooperatives of various kinds must regard themselves and, as far as possible, act as a distinct sector within the national economy of any country. As business organizations, cooperatives are partly private, partly public, but essentially different from both private enterprise and public enterprise. They are a "middle way", an economic sector in their own right.

Cooperatives must play the role of a Third Force, an alternative and countervailing power to both Big Business and Big Government. A cooperative is a business enterprise in which the elements of ownership, control and use of service are united in one group of persons. The distinguishing feature of cooperative business is its dual nature as economic enterprise and social organization. An economy based on one form of business organization alone is neither desirable nor possible in modern times. The best economic order is achieved through a mixed economy. To justify their existence and fulfil their purpose, cooperatives must make a significant and unique contribution to solving some of the massive problems facing mankind today.

Governments are expected to provide a supportive policy, legal and institutional framework, provide support measures based on activities, provide oversight on terms equivalent to other forms of enterprise and social organization, adopt measures to improve access to finance for disadvantaged groups, and topically, to promote the formalization of the informal economy. Government can contribute significantly to improving cooperative performance by facilitating access of cooperatives to support services, particularly support to cooperative human resource development.

Hence, this paper concludes that to be effective and successful, cooperatives must continuously achieve two inter-related goals: enhance viability and improve ability to service its members; and remain an economically viable, innovative and competitive enterprise. The study therefore recommends that government should give maximum financial and non-financial supports to cooperative societies to enhance sustainability.

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SOCIO-ECONOMIC DETERMINANTS OF CATFISH MARKETING AMONG WOMEN IN OGBARU LOCAL GOVERNMENT AREA OF ANAMBRA STATE.

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Abstract

This study was conceptualized to analyze the socio-economic determinants of catfish marketing among women in Ogbaru Local Government Area of Anambra State. A multistage sampling technique was employed in the selection of location and respondents. The data were collected from 100 catfish women marketers, the primary instrument used for data collection was structured questionnaire. The data were analyzed using descriptive statistics, gross margin and a 5-point likert scale. The farmers had an average total cost of ₦ 410,750 and made average total revenue of ₦ 568,300. The gross margin realized from the marketing activities were ₦ 314,500. The constraints faced by catfish women marketers include; poor transportation, inadequate infrastructure, inadequate extension service, unsteady market prices and lack of finance. The study recommended that financial institutions and cooperative societies should make loans more available to women catfish marketers, catfish marketers should be encouraged to form and manage functional cooperatives as a way to pool their resources for individual development within the catfish marketing industry.

Key Words: *Socioeconomic, Determinant, Catfish, Marketing, Small Holder, women*

Introduction

In Nigeria fish accounts for a high proportion of animal protein intake of the population (Ekerete & Asa, 2014). Catfish provide at least 40% of dietary animal protein of people living in the developing world. Fish also supply highly digestible protein and is a rich source of minerals, fatty acids and water soluble vitamins Njoku & Offor (2016). The high value of nutrition in fish is particularly important for lower income groups that might otherwise depend on a cereal-based food to meet their dietary needs. Cereal grains are usually low in lysine and sulphur-containing amino acids; so by supplementing their diets with fish significantly raises the biological value of the diet. According to (FAO 2016), fishery products like many other animal products contain nitrogenous compounds, lipids, carbohydrates, minerals and vitamins. A distribution channels can be defined as a sequence of markets or discrete exchanges which a given product passes through under the supervision and control of middlemen from the production location to the final consumer. Four major channels of distribution were identified in reference to developed economies, from producer to consumer, from producer to one middleman, from producer to wholesaler

and retail to consumer Njoku & Offor (2016). This are the traditional marketing channel of distribution for consumer goods. The shorter a marketing channel, the more efficient the marketing activities and profit maximization. A marketer selects a channel of distribution which seems to yield the highest possible net profit on his sales (Isibor 2014). Under imperfect market competition pricing decision by firms are based on cost orientation pricing, demand oriented and competition oriented pricing. Consequently, prices of catfish changes as it passes through the middlemen, and becomes expensive when it gets to the consumers (Eniola, 2019). Federal Ministry of Agriculture and Rural Development (FMARD, 2016) reported that the middlemen performing the role of marketing are being accused of earning higher profits in the marketing system. Women plays a vital role in the marketing of catfish, and they make use of convenient channels to distribute. As the fishermen approach their landing sites, women catfish marketers come around to purchase these fishes (Eniola, 2019). Marketing and distribution channels are important characteristics in the process of getting produce from source to consumers. Federal Ministry of Agriculture and Rural Development (FMARD, 2016) categorized marketing channels into centralized and decentralized channels. Centralized channels deals with agents who serve as middlemen between producers and consumers while decentralized is a kind of channel where both consumers and agents can buy directly from the producers (Okpeke & Akarue, 2015).

Statement of the Problem

In spite of the increasing growth by other major sources of animal protein such as livestock and poultry industries, the problem of protein deficiency has continued unabated due to the current level of production in the country (Eniola, 2019). Fish constitutes about 41% of the total animal protein intake by the average Nigerian, hence there is a great demand for fish in the country (Federal Ministry of Agriculture & Rural Development, 2011). Fish is important as food, fish oil, fish skin and leather, fish meal and fish manure, medicine and disease control. Catfish production enhance the economy of Nigeria as it serves as a source of income, reduces the rate of unemployment (Emmanuel and Omotoriogun, 2010). Several studies have been carried out on catfish production and marketing, a few of these, Ansa, (2014) examined the challenges and production process of catfish hatcheries in the Niger Delta region of Nigeria. He reported that the major constraints faced by catfish farmers were poor access to credit majority. Adeyemo, Ganiyu and Olugasa (2013) examined comparative evaluation of productivity and cost effectiveness of Catfish fingerling production in Earthen Pond and Recirculation System in Ibadan, Oyo State. They stated that the cost of production is high with increased yield. Akinpelu, Ayeloja, George, Adebisi, Jimoh and Idowu (2013) carried out gender analysis of processing activities among commercial catfish processors within Ibadan Metropolis They reported that majority (78.45%) were women and was a profitable venture. Despite all these studies in catfish production none of these studies have been able to establish the fact that catfish marketing among women are profitable in Ogbaru Local

Government Area of Anambra State. It is this gap that this study seeks to fill by focusing on the economic analysis of catfish marketing in Ogbaru Local Government Area. It therefore becomes imperative to carry out this research with a view to producing answers to the following research questions:

- i. What are the marketing channels of catfish women marketers in the study area?
- ii. What are the profitability of catfish marketing?
- iii. What are the constraints faced by the catfish women marketers?

Research Objectives

The broad objective of this study was to analyze the socio-economic determinants of Catfish Marketing among Women in Ogbaru Local Government Area of Anambra State.

The specific objectives were to;

- i. identify the marketing channels of catfish women marketers
- ii. estimate the profitability of catfish marketing
- iii. identify the constraints faced by the catfish women marketers in the study area.

Literature Review

Concept of Marketing

The demand for fish and fish products is far less than its supply. Almost everybody eats fish either dried or fresh, compared to other products such as pork and beef that are being affected by religious and medical constraints, respectively (Njoku & Offor, 2016). Fish has Omega-3 Fatty Acids, which is highly essential to the body and it can be sold to people of every kind in hotels, churches, at conferences, meetings, banks, individual door-to-door delivery and so on. The goal of every fish marketer is to make profit, and a proper investigation is needed to ascertain the level of demand for catfish in the area. Catfish marketers are free to locate a good and standard market elsewhere other than their immediate environment. Market survey must be carried out in their proposed markets, to enable them find out the market price of an average catfish, the level of demand and the time of the year catfish are sold most. There is need to have a ready market for catfish in order to promote efficiency and maximize profits. Therefore, catfish can be sold everywhere, such as hotels, restaurants, schools, hospitals and so on (Onyekuru., Ihemezie & Chima ,2019). Fish is not a durable product that can be stored for a short period of time when properly dried and also can only be sold as fresh livestock. If you are not having a ready market, you may be forced to keep many grown up fishes and the process of making profits will be minimized. When kept alive the marketer will still be feeding them while they should have been sold, at the process reducing the estimated profit. When the fishes may grow to a point where the environment will be too crowded for them, there may be expectation of some disease outbreak. Thus, researching properly about the market in your environment before investing into the catfish marketing is very necessary (Onyekuru, Ihemezie & Chima, (2019).

Concepts of Catfish Marketing Channels

A distribution channels can be defined as a sequence of markets or discrete exchanges which a given product passes through under the supervision and control of middlemen from the production location to the final consumer (Alawode, Oluwatayo, Adebowale, 2016). Four major channels of distribution were identified in reference to developed economies

- From producer to consumer
- From producer to one middleman
- From producer to wholesaler to retail to consumer (This is the traditional marketing channel of distribution for consumer goods). The shorter a marketing channel, the more the efficient is the marketing, profit maximization, a producer or trader selects that channel of distribution which promise to yield the highest possible net profit on his sales (Isibor, 2014). As output increases along the distance between the producer and the final consumer, more level will usually be added to the system (of distribution) and additional intermediaries become the choice to select. The distribution path must ensure the availability of product at the purchase point, utilized by farmer's price determination under perfect market at wholesale level by reference to general level of prices in the market; and through the market forces of demand and supply. At retail level, bargaining is the most popular social principle in setting market price. Under imperfect market competition pricing decision by firms are based on cost orientation pricing, demand oriented and competition-oriented pricing. Fish marketing does not usually involve the fishermen and consumers only but there are other players in the fish distribution channels especially middlemen. Consequently, prices of fish change as it passes through these middlemen such that by the time it reaches consumers, it becomes expensive (Alawode and Jinad, 2014). The middlemen performing the role of marketing are being accused of earning higher profits in the marketing system. As the fishermen approach their landing sites, fish marketers come around to purchase the fish, though the number of intermediaries or middle men which ranges from one to three. Marketing and distribution channels are important characteristics in the process of getting produce from source to consumers. (Isibor, 2014) categorized marketing channels into centralized and decentralized channels. Centralized channels deal with agents who serve as middlemen between producers and consumers while decentralized is a kind of channel where both consumers and agents can buy directly from the producers. Fish distribution channel is common to most developing countries with series of middlemen between producers and consumers.

Concept of Catfish Channel

Catfish is the “king” of aquaculture in terms of pounds produced and total value. The majority of catfish production occurs in the river, lake, dams. Ponds and so on. This southern delicacy is raised in earthen ponds filled with well water and fed a floating, grain-based diet. Catfish has a mild flavor and is high in protein and low in calories (Njoku & Offor, 2016). According to the National Statistics Service, 471,683,000

pounds of U.S. farm-raised catfish were processed in 2010. Farmers received an average price of \$0.861 per pound. Additional catfish were processed locally or sold for pond stocking and pay lakes (fee fishing operations). The most commonly cultured species is the channel catfish, *Ictalurus punctatus*, although a hybrid between the channel catfish and the blue catfish, *Ictalurus furcatus*, is growing in popularity. Channel catfish are a warm water species with an optimal temperature for growth of 85°F (29°C). In the wild, catfish are omnivores, feeding on a wide variety of animal and plant materials. In culture ponds, fish are fed a complete diet, typically composed of soybean meal and other seed or grain products, with only a small amount of animal protein (Njoku & Offor, 2016).

Concept Catfish fingerlings

Most catfish production occurs in earthen ponds, typically 5 to 10 acres in size, with relatively small numbers produced in cages and raceways. A new production system developed in Nigeria has split-pond system, and shown to improve yields. Farmers are beginning to add these systems to their farms. Most catfish are raised in multiple-batch production. Small catfish (fingerlings) are typically stocked each spring and market-sized fish removed periodically by seining. Ponds are left for production for years without draining, as wastes are removed through natural processes within the ponds. In single-batch production, fingerling catfish are stocked and grown until almost all of the fish have reached market size, then the entire pond of fish is harvested at once, and then the pond is re-stocked (Oyibo, et al., 2020). In catfish feed production, the ground feed ingredients are mixed and sent through an extruder, resulting in feed pellets that float. To feed catfish, farmers use a truck or trailer-mounted hopper with a blower that shoots the feed pellets over the water surface. Thus, the fish feeding response is easily monitored to ensure that fish get fed enough but not too much. Dissolved oxygen concentrations in catfish ponds will decline over the night during the growing season, and farmers use aerators (typically electric paddlewheels) to increase oxygen levels in the water (Onyekuru, IHEMEZIE & CHIMA, 2019). Nigeria catfish production had declined in recent years, in part due to competition from *Pangasius* species of catfish (all catfish are within the order *Siluriformes*), imported from Vietnam and sold in the market. Some channel catfish fillets are also from Delta, Bayelsa, Cross River and River State. Tilapia products also appear to compete with catfish in certain markets. High feed prices also increased the costs of production, especially since feed is a major operating cost. Recent increases in prices paid to farmers for catfish have made catfish culture profitable again, and farmers are increasing production to fill a shortage of U.S.

Materials and Methods

The Study Area

The study was carried out in Ogbaru Local Government Area of Anambra State, Nigeria. Ogbaru local government area is one out of the 21 local government areas

of Anambra State. Anambra State is one of the 36 States in Nigeria, it is located in the South-Eastern part of the country. The State is sub-divided into four agricultural zones to aid planning and rural development. Ogbaru is a humid (230) tropical rain forest zone, it is located between longitude 6° 45' 1" E and latitude 6° 1' 53" N. has a boundary with Asaba in Delta State and Ndoni in River State. (www.anambrastate.govt.ng 2015) Ogbaru is located by the bank of River Niger. Ogbaru people are mainly fishermen and women fish marketers. The people in the area are traditionally known as warriors. The LGA has 16 communities which include: Atani, Akili-Ogidi, Akili-Ozizor, Amiyi, Mputu, Obeagwe, Ohita, Odekpe, Ogbakugba, Ochuche-Umuodu, Ossamala, Ogwu-Aniocha, Umunankwo, Umuzu, Okpoko and Ogwu-Ikpele. Atani is the LGA headquarter. Ogbaru is neighbored by Onitsha, a major commercial city in Southeast Nigeria and that gives Ogbaru people quick access to the market. (www.anambrastate.govt.ng.2012).

Population of the Study

The population of the Study include all the registered women catfish marketers in Ogbaru Local Government Area (LGA) of Anambra state.

Sampling Procedure / Technique

Two stage sampling techniques was used in selection of the women catfish marketers. In stage 1, five communities were purposively selected, which were, Obeagwe, Ogbaru, Umuzu, Amiyi and Ohita based on prior knowledge of their active engagement in catfish marketing.

In stage 2, twenty (20) women catfish marketers were randomly selected from each of the (5) selected communities giving a total of (100) respondents were used for the study.

Method of data Collection

Data for the study was collected through primary and secondary source. The primary source would be through the use of structured questionnaires.

Validity and Reliability of instrument for Data collection

To ascertain the Validity of the instruments, the initial drafts were given to three lectures from the faculty of agriculture for face and content validity. The Cronbach's Alpha correlation technique was used to ascertain the reliability of the instrument.

Data Analysis

Descriptive statistic was employed to describe objective (i), Gross Margin Analysis was used to analyze objective (ii) and Likert scale rating technique was used for objective (iii).

Mathematical Expression/Model Specification**Enterprise Budget Analysis Model**

$$NP = (TR - TVC) - TFC$$

Where;

NP	=	Net Income or Net Returns in Naira (₦)
TR	=	Total Revenue in Naira (₦)
TVC	=	Total Variable Cost in Naira (₦)
TR - TVC	=	Gross Margin in Naira (₦)
TFC	=	Total Fixed Cost

Likert scale rating technique

A likert scale is a psychometric scale in survey research. When responding to a likert questionnaire item, respondents specify their levels of agreement or disagreement on a symmetric agree - disagree scale for a series of item statement. The scale captures intensity of their feelings. A 4 - point rating scale was employed in this study. This was regarded as strongly agree (SA), agree (A), disagree (DA), and strongly disagree (SD), with corresponding values of 4, 3, 2, and 1 respectively. The mean score (MS) of the respondents based on the 4-point rating scale was computed as = 2.50 cut off point. Based on this, any score below 2.50 (MS<2.50) was taken as a weak factor and may not be considered while those with mean score of above 2.50 (MS>2.50) were taken as strong factors and thus be considered.

Results and Discussion**Table1:** The marketing channels of catfish in the study area.

Variable	Frequency	Percentage	\bar{X}
What is your position in the market?			
Producer/Supplier	25	22.5	
Wholesaler	67	60.4	
Retailer	8	7.2	1.83
How much do you sell a table size fish?			
900-1200	30	27.0	
Above 1500	70	63.1	2.70
Who do you sell to?			
Retailer	72	64.9	
Consumer	28	25.2	2.28
What quantity of catfish do you buy?			
1000-2000	50	45.0	
3000-4000	44	39.6	
Above 5000	6	5.4	1.56

What quantity of matured catfish do you sell weekly?			
100-150	38	33.20	
151-200	44	39.60	
201-250	18	16.20	167.00
How often do you buy catfish?			
Weekly	20	18.0	
Monthly	80	72.1	2.80
How often do you buy catfish preservatives?			
Daily	14	12.6	
Weekly	32	28.8	
Fortnight/every two weeks	54	48.6	2.40
What means of transportation do you use to convey fish to the market?			
Wheelbarrow	11	9.9	
Keke	26	23.4	
Bus	63	56.8	4.15

Source: Field survey 2022

Most of the catfish marketers were wholesalers, who buy at least 1000 pieces of catfish and sell them to retailers at a minimum price of 900 naira each. At least, 100 matured catfish are sold monthly and their preservatives are being replenished at intervals of two weeks. Bus is the most rampant means of transportation of conveying fishes to the market. This report is in line with the survey of Isibor (2014), who reported that catfish marketers are dominated with wholesaler.

Table 2. Profitability of Catfish marketing

Item	Average value (₦)	Percentage of Variable cost
A) Total Revenue	568,300	
B) Variable Cost		
Cost of transportation	117,270	43.32
Cost of preservatives	48,000	19.74
Labour	42,500	14.47
Cost of communica.	31,600	10.75
Miscellaneous (water, electricity)	14,430	11.72
Total Variable Cost	253,800	

C) Fixed Cost

Storage facility	132,400
oven	21,800
Plastics	2,750
Total Fixed Cost	156,950
Gross margin	274,500
Net farm income	102,550
Return on investment	0.52

Source: field survey, 2022

Profitability Analysis of catfish farming

The result of the cost and returns in catfish marketing in (Table 2) estimated average costs and returns per marketing cycle of women catfish marketers in the study area. The result showed that the total variable costs incurred was ₦253,800; the total fixed cost was ₦156,950 per marketing cycle, the total cost was ₦ 410,750. The gross margin per marketing cycle was ₦ 314,500 and the estimated net farm income was ₦ 157,550. The return on investment was 0.52, this indicated that catfish marketing in ogbaru local government Area were profitable and seen as a good business venture. This result is in line with the report of Ume, et al., (2016) who opined that the gross margin of catfish marketers was ₦322,600 with profit of ₦153,100. Therefore, catfish marketing is profitable and should be giving priority in the study area. Also, the results showed that for every naira invested, a profit margin of ₦0.52K was realized. This study is in line with the report of Ashley-Dejo, Olaoye & Adelaja (2017) who stated that catfish marketing is a profitable venture.

Table 3: The constraints facing catfish farmers in the study area.

S/N	Items	N	\bar{X}	Std. Deviation	Decision
1.	Unorganized market	100	2.36	.77	Reject
2.	Price instability	100	2.21	.81	Reject
3.	Poor storage facility	100	4.05	.73	Accept
4.	Poor electricity for drying	100	2.22	.58	Reject
5.	Cost of communication	100	3.56	.83	Accept
6.	Bad road	100	3.79	.66	Accept
7.	Inadequate extension service	100	3.82	.69	Accept
8.	Weak marketing channels	100	3.82	.52	Accept
9.	Poor transportation	100	2.14	.62	Reject
10.	Inadequate capital	100	3.98	.47	Accept
	Grand \bar{X}	100	3.20		

Source: Field survey 2022

Constraints faced by women catfish

Marketers

Women catfish marketers encountered many constraints and they include inadequate capital, price instability, poor storage facility, poor electricity for drying, high cost of communication, bad road, Inadequate extension service, weak marketing channels, poor transportation and unorganized market. The results presented in (Table.3) showed that poor storage facility (4.05%) was indicated by the women marketers as the most serious constraint to them. The second constraints were insufficient capital (3.98%), catfish marketing is capital intensive and thus requires big capital investment for reasonable profit. Another serious constraint was inadequate extension service (3.82%) that will guide the marketers on the best storage facility to adopt. This could be a result of the poor motivation given to the extension agents by the government. There have been series of complaints coming from marketers on not getting adequate extension service from the government either at the State or local government level. This is in line with the study of Ugwumba and Nnabuife (2010) who reported poor storage facility as serious setback to profits realizable from catfish marketing.

Conclusion

The study investigated the Socio-economic determinants of Catfish Marketing Among Women in Ogbaru Local Government Area of Anambra State. The analysis of data collected revealed the following;

The result showed that the total variable costs incurred was ₦253,800; the total fixed cost was ₦156,950 per marketing cycle, the total cost was ₦ 410,750. The gross margin per marketing cycle was ₦ 314,500 and the estimated net farm income was ₦ 157,550. The return on investment was 0.52, and revealed that catfish marketing is a very profitable business.

The result showed that most women catfish marketers are wholesalers, who buy at least 1000 pieces of catfish and sell them to retailers at a minimum price of 900 each. At least, 100 matured catfish are sold monthly and their feed is being replenished at intervals of two weeks. Buses were the most rampant means of transportation of fishes to the market. This shows that there is high returns or profit in catfish production. Women catfish marketers encountered many constraints and they include inadequate capital, price instability, poor storage facility, poor electricity for drying, cost of communication, bad road, inadequate extension service, weak marketing channels, poor transportation and inadequate capital.

Recommendations

- i. Association of women catfish marketers should regulate the market price by maintaining a standard.
- ii. Women catfish marketers should be encouraged to form and manage functional cooperatives as a way to pool their resources for individual development within the fish marketing industry.

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STABILITY OF TENURE AND EMPLOYEE PRODUCTIVITY: A STUDY OF MICROFINANCE BANKS IN ANAMBRA STATE

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Abstract

The Research assessed the impact of Stability of Tenure and Employee Productivity within the context of Microfinance Banks in Anambra State, Nigeria. The study identified challenges such as limited startup capital, ineffective management strategies, inadequate personnel management approaches, and insufficient technical expertise as problems that have hindered the effects of stability of tenure on Employee Productivity in Microfinance Banks. In response, this research aimed to investigate the impact of Job Security on Employee Commitment and explore the relationship between Career Progression and Employee Loyalty within Microfinance Banks in Anambra State, Nigeria. This study was grounded in the internal theory of Labour Turnover by Alan Cumming (1980). A survey research design was adopted, utilizing Taro Yamane's formula to determine the sample size from a population of 370. Pearson's Correlation was employed to test the hypotheses. The findings indicated a significant positive correlation between Job Security and Employee Commitment, as well as a significant positive correlation between Career Progression and Employee Loyalty within Microfinance Banks in Anambra State, Nigeria. In conclusion, the study underscored a strong positive link between Job Security and Employee Commitment, as well as a positive connection between Career Progression and Employee Loyalty in Microfinance Banks in Anambra State, Nigeria. The research recommended a consistent review of institutional policies to enhance job security for employees and the creation of supportive structures to encourage career advancement within Microfinance Banks in Anambra State, Nigeria.

Keyword: *Stability of Tenure, Employee Productivity, Job Security, Employee Commitment and Career Progression*

Introduction

What distinguishes a good company from a great one is its employees. Even in a world shaped by technology and market dynamics, the most prosperous companies have recognized that their most valuable resource resides within their workforce. The endurance and achievements of an organization rely on the dedication of its team members. A significant factor that impacts the level of commitment among employees is their organizational tenure. Consequently, organizations must proactively pursue stability in the tenure of their workforce (Emeaghalu, 2019). The concept of upholding tenure stability has garnered increased attention in recent times, driven by economic pressures and heightened industry competition to retain skill and enhance expertise through career progression. This growing emphasis is potentially why Adebayo and

Lucky (2012) concurred that job tenure stability has ascended the ranks to become a vital consideration on employees' preference lists, sharing akin significance with remuneration and healthcare privileges.

As a result, organizations encounter a pivotal challenge that surpasses mere employee recruitment – it encompasses guaranteeing job security for employees as long as they wish. The ramifications of frequent employee turnover extend beyond indicating organizational inefficiency; they lead to unfavorable consequences. Moreover, when employees grapple with uncertainty about job security and begin seeking alternative prospects, their allegiance to the organization wanes, leading to diminished dedication and compromised performance. Ogueli (2018) underscores the principle of stability of tenure, asserting that for an organization to operate seamlessly, personnel turnover should not be frequent. This principle dictates that, within an organization, once an employee is assigned a role, the role should not undergo frequent changes.

Organizational management should ensure stability in job tenure and minimize frequent reshuffling of positions. A sense of job security inspires employees to fully channel their capabilities toward achieving organizational objectives, fostering a sense of allegiance between the employee and the organization. The stability of employee tenure significantly influences job satisfaction and productivity, explaining a notable portion of the variance (Hackman and Oldham, 2005). As organizational tenure deepens, employee output tends to rise, particularly in environments that prioritize stability (Hunter, 2008). Such environments achieve objectives efficiently, leveraging employee contributions. Conversely, violation of this principle through frequent transfers or high turnover triggers dissatisfaction and underperformance, hindering goals. Amid factors shaping productivity, job tenure stability is crucial—the duration an employee stays in a role.

Employee productivity within microfinance banks plays a vital and multifaceted role, particularly in the context of providing essential financial services to unbanked and underserved populations. The performance and efficiency of employees hold a direct and profound impact on the microfinance institution's ability to fulfill its mission and effectively serve its diverse clientele. Operating within Anambra State, Nigeria, microfinance banks navigate a dynamic landscape marked by evolving regulatory norms, technological advancements, and shifting market dynamics. In such an environment, the stability of tenure emerges as a pivotal factor that exerts significant influence over employee conduct, motivation, and dedication.

Within the microfinance sector, the ramifications of employee productivity are far-reaching. These institutions cater to marginalized individuals and small-scale enterprises, often serving as their primary access point to financial services. Effective and efficient employee performance directly affects the delivery of essential services, financial inclusion efforts, and the overall advancement of local economies. Given the intricate and impactful role that microfinance banks hold within the communities they

serve, the productivity of their employees directly contributes to the achievement of social and economic development goals (Okpala, 2020).

Anambra State's microfinance banks operate amidst a rapidly changing landscape. The evolution of regulatory frameworks, rapid technological advancements, and market shifts necessitate an adaptable and skilled workforce. Herein lies the significance of stability of tenure—a component that carries potential implications for organizational success. When employees experience a sense of job security and anticipate stable tenures, their dedication and commitment are often magnified. This heightened commitment prompts them to invest more deeply in their roles, acquire specialized skills, and align their efforts with the institution's overarching objectives. Against this backdrop, the study seeks to delve into the impact of stability of tenure on employee productivity within the microfinance banking sector in Anambra State. By exploring the relationship between job stability and various dimensions of employee productivity, such as job performance, job satisfaction, and organizational commitment, this study aims to contribute valuable insights to the field of human resource management in microfinance institutions.

Statement of the Problem

Despite the recognized significance of stable job tenure for employee satisfaction and operational smoothness, microfinance banks grapple with establishing consistent tenure for high-performing personnel. The existing problems prompting this study include factors such as limited startup capital, ineffective management strategies, inadequate personnel management practices, and insufficient technical proficiency. These factors collectively contribute to the struggle microfinance banks encounter in establishing stable job tenure for their employees. Consequently, these challenges impede career advancement, undermine job security, hinder talent retention, and result in the underutilization of valuable expertise within the microfinance sector in Anambra State.

In light of these challenges, the study aims to delve into the intricate dynamics between stability of tenure and employee productivity in microfinance banks. Through a comprehensive investigation, this research seeks to shed light on the specific ways in which addressing the stability of tenure can positively impact employee productivity and overall organizational performance within the unique context of Anambra State's microfinance banks.

Objectives of the Study

The overarching goal of this study is to assess how the Stability of Tenure affects Employee Productivity within the context of Microfinance Banks in Anambra State, Nigeria, spanning the period from 2008 to 2019. To achieve this, the study has specific objectives as follows:

- i) To investigate the impact of Job Security on Employee Commitment in Microfinance Banks in Anambra State, Nigeria.

- ii) To explore the relationship between Career Progression and Employee Loyalty within Microfinance Banks in Anambra State, Nigeria.

Research Questions

- 1) How does Job Security Influence Employee Commitment in Microfinance Banks in Anambra State, Nigeria?
- 2) What is the nature of the relationship between Career Progression and Employee Loyalty within Microfinance Banks in Anambra State, Nigeria?

Hypotheses of the Study

H₀: There is no significant impact of Job Security on Employee Commitment in Microfinance Banks in Anambra State, Nigeria.

H₀: There is no significant relationship between Career Progression and Employee Loyalty within Microfinance Banks in Anambra State, Nigeria.

Literature Review and Theoretical Framework

Job Security

Job security refers to the confidence an employee has in the continuity of their employment due to prevailing economic conditions (James, 2012). Adebayo and Lucky (2012) emphasize that it revolves around an individual's likelihood of retaining their job, protecting them from unemployment. Positions lacking indefinite contracts or reasonable guarantees are deemed lacking in job security.

It also implies employees' freedom from the fear of job loss or dismissal. Certain professions and job sectors offer greater job security than others. Job security assures employees that they can retain their current role for an extended period. It is the organization's assurance that employees won't be unjustly dismissed (Simon, 2011). Factors like employment contracts, labor laws, personal attributes such as education, work experience, functional role, industry, and location play a role in determining the demand for an individual's skills and thus their job security.

In contrast, essential skills and past experience required by employers, considering economic and business conditions, can also secure an individual's job (Adebayo and Lucky, 2012). Generally, certain jobs and industries are perceived to offer high job security. For example, government, education, healthcare, and law enforcement jobs are considered secure, while private sector jobs are seen to have lower job security, influenced by industry, location, occupation, and other factors (Emeaghalu, 2018). Ultimately, job security depends on individuals' employability and whether their skills are in demand.

In a rapidly evolving society, where companies adapt to technological changes and market demands, job security experiences fluctuations. During periods of economic growth, increased demand leads to more jobs and greater job security. Conversely, during economic downturns, companies downsize to cut costs, decreasing job security. Employment laws offer limited protection against unemployment; having the

right skill set remains crucial. In economies like the USA, job security depends on economic and business conditions due to the capitalist system, impacting entrepreneurship and government intervention. However, in economic downturns like Nigeria's recession, companies lay off workers to reduce costs, decreasing job security.

Employee Commitment

Emeaghalu (2018) defines commitment as a form of emotional and value-based attachment to an organization's objectives. It involves internal emotional pressures that motivate individuals to act in ways aligned with their organization's interests, driven by a sense of moral obligation. While commitment's roots lie in obligation, it has become synonymous with continuous behavioral patterns (Nazari 2005). This notion revolves around an individual's role in relation to the organization's values and goals.

Employee commitment has been approached from various angles. According to Meyer and Herscovitch (2001), it represents a psychological state binding employees to an organization, curbing turnover issues. It also encompasses the mindset that drives individuals to pursue courses of action relevant to specific targets. Sharma and Bajpai (2010) define commitment as demonstrated by employees who maintain their association with an organization and invest substantial effort in achieving its goals. Elevated effort from committed employees correlates with enhanced performance and effectiveness at both individual and organizational levels.

Akintayo (2010) views employee commitment as the degree of devotion felt toward the organization. Ongori (2007) characterizes it as a comprehensive response to the entire organization, indicating the level of attachment or loyalty an employee feels towards it. Zheng (2010) simplifies employee commitment as the attitude employees hold towards the organization, encompassing various components. Newstrom and Davies (2002) consider it the extent to which an employee identifies with and actively participates in the organization, akin to a magnetic force attracting objects. This magnetic pull gauges an employee's willingness to stay with a firm in the future, rooted in belief in the firm's mission, goal-driven effort, and intentions to remain.

Yoon, Duncan, Lee, Scarloss, and Shapley (2007) suggest that plateaued employees may exhibit higher turnover due to career advancement desires. Research demonstrates that plateaued employees tend to have a strong intention to quit due to limited opportunities within their current organization (Yamamoto, 2006). Mudor and Tooksoon (2011) identify factors such as job training and pay practices as contributors to job satisfaction. Enhancing these attributes could indirectly reduce employees' intention to leave, and they recommend organizations focus on job satisfaction and implement HR practices to reduce turnover and meet organizational goals, thereby boosting employees' intent to remain in the industry.

Career Progression

Career progression is the journey of advancing through your professional life, encompassing promotion, embracing fresh challenges, exploring novel employers, uncovering opportunities, and maximizing your career's potential (Elo, 2015). A conventional dictionary defines career progression as the process of moving towards better job positions, but our interpretation extends beyond this, embracing growth within existing roles. This involves assuming greater responsibilities, deriving increased satisfaction, and achieving personal success, as defined by each individual. Career progression doesn't solely entail securing new, superior roles; it also encompasses salary increments, added accountabilities, lateral moves within a company, and even venturing into entrepreneurship.

Numerous factors contribute to effective career progression, some beyond our control and unpredictable. However, there are key determinants that significantly influence successful career advancement, promotions, and upward mobility:

a) **Networking:** Networking takes the lead in fostering career progression. Establishing connections, becoming visible, and forging professional relationships are pivotal components of advancement. Numerous avenues exist for networking, including receptions, seminars, conferences, trade shows, and internal interactions within larger organizations.

b) **Mentoring & Coaching:** Beyond networking, mentoring and coaching are catalysts for career growth. A mentor guides you through the complexities of the professional realm, offering advice on interview strategies, industry insights, managerial challenges, and other pertinent aspects of your career journey.

c) **Training & Development:** Upskilling is a cornerstone of career progression. "Training and development" encompasses a diverse range of activities, primarily focused on courses that enhance your skills and expertise. This includes upskilling and mastering new areas of competence.

In essence, career progression involves a dynamic interplay of factors, some within your sphere of influence and others contingent on external circumstances. It's not solely about switching to better roles but also about embracing opportunities, building relationships, learning from mentors, and continuously enhancing your skills and knowledge.

Employee Loyalty

Loyalty is a multifaceted concept with various interpretations. Individuals can harbor loyalty towards different entities, either singularly or simultaneously. Loyalty implies a sense of commitment to a particular entity or a devoted attachment to someone (Arvidson & Axelsson, 2014). It can reflect an identification with an organization or societal group or even encompass a willingness to make sacrifices for someone or something (Elegido, 2013). Within the realm of employment, loyalty may manifest as

allegiance to an employer, colleagues, or a leader, significantly influencing a company's performance.

Among the early theorists exploring loyalty, Hirschman (1970) defined it as a "special attachment to an organization." His theory evolved to encompass individuals who exhibited caring for their organization, displaying unwavering dedication before contemplating leaving (Hirschman, 1970). Nurturing loyal employees is pivotal for organizations, preventing those with heightened quality awareness from being the first to exit.

The notion of loyalty entails a range of definitions and behaviors within the context of employee-organization dynamics. A broad perspective of loyalty, as articulated by philosopher Schrag (2001), underscores it as a wholehearted devotion to an object. This "object" can encompass a person, group, organization, cause, or even a nation. Applied to employees, loyalty can be directed toward diverse "objects" within the organization, and an employee may concurrently hold loyalty toward multiple entities. The essence of loyalty doesn't necessarily hinge on specific attributes of the object but revolves around a relational bond (Schrag, 2001). However, Coughlan (2005) counters that loyalty doesn't equate to forming a relationship; rather, it is an outcome that crystallizes after the relationship has been established.

Theoretical Framework

This study is grounded in the internal theory of labor turnover formulated by Alan Cumming in 1980. The internal theory, also known as structural factors, pertains to the personnel framework established within an organization, encompassing personnel policies and practices. These factors not only directly impact employee attitudes, productivity, morale, and performance but also shape employee behavior patterns, loyalty, and commitment within the organization.

Effective personnel management, orchestrated by the management of the workforce, entails the formulation and implementation of comprehensive policies that address various aspects of personnel administration. This approach aims to ensure employee satisfaction while also fostering organizational stability, thereby promoting talent retention. Cumming (1980), a key advocate of this theory, suggests that the optimal approach to retaining skilled personnel is not solely centered around providing excellent care but involves establishing stable job positions with extended tenures, thus encouraging their sustained engagement within the organization.

The researcher posits that mishandling aspects related to employee stability of tenure, be it in terms of appropriateness, adequacy, fairness, or effectiveness, can lead to internal imbalances. Such imbalances could manifest as employee disillusionment, evident through diminished morale, decreased output, and potentially, eventual departure from the employment (Anthonia, 2000).

In essence, examining the issue of organizational stability of tenure within Microfinance Banks in Anambra State should extend beyond individual satisfaction, emphasizing the crucial role of stable and extended employment tenures. Thus, investigating organizational stability of tenure involves delving into the internal theory, as it holds direct implications for staff stability and retention within the institution.

Consequently, this research adheres to both the internal theory and the dynamics it entails. The study framework considers the impact of the internal theory on data interpretation and research execution. The intertwining of these perspectives underscores the significance of organizational tenure in influencing employee productivity. For instance, the case of stagnated promotion exercises in Microfinance Banks in Anambra State a few years ago led to staff frustration and subsequent departures, underlining the critical role of tenure stability.

Empirical Review

Emeaghalu (2018) investigated the impact of job stability on employee productivity in commercial banks in Lagos. A mixed-methods approach was used, including surveys and interviews. The study collected data from employees and managers of microfinance banks in Lagos State. The study found that employees with stable job tenure exhibited higher levels of productivity. Job stability was positively correlated with employee motivation, job satisfaction, and commitment to the organization. The study concluded that maintaining stable job tenure is crucial for enhancing employee productivity in microfinance banks and recommended that microfinance banks should focus on implementing strategies that ensure job stability for their employees.

Johnson (2019) explored the relationship between career progression and employee loyalty in Federal Polytechnic, Nekede. The study used a quantitative approach, collecting data through structured questionnaires administered to employees of Federal Polytechnic, Nekede, Imo State. The study revealed a significant positive correlation between career progression and employee loyalty. Employees who perceived opportunities for career advancement within the organization displayed higher levels of loyalty. The study concluded that fostering career progression paths can contribute to increased employee loyalty and recommended that Federal Polytechnic, Nekede should establish transparent career development frameworks to enhance employee loyalty and commitment.

Okpala (2020) examined the role of stability of tenure in influencing employee productivity and organizational performance in Insurance Companies in Lagos State. The study employed a longitudinal research design, collecting data over a span of three years from multiple insurance companies in Lagos State. It combined quantitative measures of stability of tenure and employee productivity with qualitative interviews. The study found that organizations with higher levels of stability of tenure

experienced improved employee productivity and reduced turnover rates. Stable job tenure contributed to a sense of security and commitment among employees and concluded that stability of tenure plays a vital role in enhancing both employee productivity and overall organizational performance in insurance companies in Lagos State. It recommended that insurance companies in Lagos State invest in strategies to ensure job security and communicate career advancement opportunities effectively.

Gap in Knowledge

Existing studies focused on the stability of tenure and employee productivity factors on different industries. As such, there is a gap in the literature regarding the direct and localized investigation of how stability of tenure influences employee productivity within the unique operational and cultural context of microfinance banks in Anambra State.

In other words, while the importance of stability of tenure is acknowledged, there is a need for research that delves deeper into the nuances and dynamics of this relationship within the microfinance banking sector of Anambra State. This gap in knowledge presents an opportunity for the study to contribute valuable insights that are specific to the microfinance banks in the region, potentially identifying factors that are distinct from other industries and regions.

Methodology

Research Design

The study adopted the survey research design. Survey design is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. It specifies how data was collected and analyzed. This method was chosen for data collection, because it enables the researcher to solicit for information that might not be available on the pages of the text book.

Population of the Study

A cross section of the staff of Microfinance Banks in Anambra State, Nigeria comprising of 370 members drawn from every rank and cadre will be sampled.

Sample and Sampling Technique

The researcher used Taro Yamane's formula with 95% confidence level to the 192 population to determine the sample size from the population.

Method of Data Collection

Data for the study collected from primary and secondary source. The primary data was generated through the use of structured questionnaire to elicit required information. Copies of structured questionnaire was administered and the participants will be placed on objective response for each statement on a likert scale. A 5 point Likert scaled questionnaire was used in collecting relevant data for the study; it was arranged ranging from Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1).

Method of Data Analysis

The data gathered from the survey was analyzed using Statistical Package for Social Science (SPSS) version 29.0. Descriptive statistics was used for mean and correlation coefficient analysis was used to test the hypotheses. This was in a bid to establish the nature of relationship that exists between the dependent and independent variables. The level of significance used was 5 percent interval reliability. The test of hypothesis will be addressed through the application of Pearson Product – Moment Correlation analysis. A 5-point Likert scale assigned numerical values of Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1) was used.

$$\text{Mean } [\chi] = \frac{5+4+3+2+1}{5} = 3.0$$

Test of Hypotheses

The formulated hypotheses were tested with Pearson’s Product- Moment Correlation as shown below.

Decision Rule: Reject H_0 if the p-value is less than 0.05 (level of significance) and accept the alternate.

$H_{0i} P = 0$

$H_a P \neq 0$

H_0 : There is no significant impact of Job Security on Employee Commitment in Microfinance Banks in Anambra State, Nigeria.

Table 4.3.1: Correlation Analysis of Job Security and Employee Commitment

		JOB SECURITY	EMPLOYEE COMMITMENT
JOB SECURITY	Pearson Correlation	1	.858**
	Sig. (2-tailed)		.000
	N	192	192
EMP COM	Pearson Correlation	.858**	1
	Sig. (2-tailed)	.000	
	N	192	192

** Correlation is significant at the 0.01 level (2-tailed).
 SPSS Ver. 29.0

Source:

Decision: the computed r (0.858) is greater than the critical (0.832) value for two - tailed test at 0.05 level of significance, the null hypothesis is rejected and alternate hypothesis is accepted which implies that there is a significant impact of Job Security on Employee Commitment in Microfinance Banks in Anambra State, Nigeria.

Hypothesis 2

H_0 : There is no significant relationship between Career Progression and Employee Loyalty in Microfinance Banks in Anambra State, Nigeria

Table 4.3.1: Correlation Analysis of Career Progression and Employee Loyalty.

		CAREER PROGRESSION	EMPLOYEE LOYALTY
CAREER PROGRESSION	Pearson Correlation	1	.926**
	Sig. (2-tailed)		.000
	N	304	304
EMPLOYEE LOYALTY	Pearson Correlation	.926**	1
	Sig. (2-tailed)	.000	
	N	304	304

** . Correlation is significant at the 0.01 level (2-tailed).
SPSS Ver. 29.0

Source:

Decision: the computed r (0.926) is greater than the critical (0.902) value for two-tailed test at 0.05 level of significance. Null hypothesis is rejected and alternate hypothesis is accepted which implies that there is a significant positive relationship between Career Progression and Employee Loyalty in Microfinance Banks in Anambra State, Nigeria.

Summary of Findings

The following findings were drawn from the test of hypotheses carried out in the add
a) A statistically significant positive correlation was evident between Job Security and Employee Commitment in Microfinance Banks within Anambra State, Nigeria.

($r = 0.852$, $p < 0.05$, with $r_{critical} = 0.832$)

b) The study found that there is a significant and robust positive relationship between career progression and employee loyalty in Microfinance Banks operating within Anambra State, Nigeria.

($r = 0.926$, $p < 0.05$, with $r_{critical} = 0.902$)

Conclusion

This study delved into the intricate dynamics of stability of tenure and its influence on employee productivity within Microfinance Banks in Anambra State, Nigeria. The findings shed light on significant positive relationships among key variables, highlighting the pivotal role of job security, career progression, and talent retention in shaping employee commitment, loyalty, and morale.

The correlations observed between Job Security and Employee Commitment, as well as between Career Progression and Employee Loyalty, underscore the essentiality of fostering an environment that nurtures job security and enables career advancement. These correlations not only validate the theoretical framework but also provide empirical evidence of the interconnectedness between stability of tenure and employee productivity.

Recommendations

Based on the research findings, several actionable recommendations emerge to enhance employee productivity in Microfinance Banks within Anambra State, Nigeria:

- a) Microfinance Banks should implement comprehensive strategies to ensure job security for employees. Regular policy reviews and transparent communication can help mitigate job insecurity concerns, fostering higher levels of commitment and dedication.
- b) Microfinance Banks should establish clear pathways for career growth and progression. Offering training, development opportunities, and a well-defined career roadmap will motivate employees to remain committed and loyal, resulting in improved productivity.

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SOCIO-ECONOMIC CHARACTERISTICS OF WOMEN COOPERATIVE ORGANIZATIONS AS DETERMINANTS OF THEIR USE OF AGRICULTURAL EXTENSION SERVICES IN SOUTH EAST, NIGERIA

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Abstract

This study dwelt on socio-economic characteristics of women cooperative organizations as determinants of their use of Agricultural Extension Services in South East Nigeria, focusing on the socio-economic characteristics of the members of the women agricultural cooperative in Southeast, Nigeria and determining the influence of the socio-economic characteristics of the members of the women agricultural cooperatives on their use of Agricultural Extension Services (AES). To achieve the objective of the study, multistage random sampling technique was adopted to select 399 respondents of women agricultural cooperative members. Primary data was sourced through the use of structured questionnaire. Data collected were analyzed with both descriptive and inferential statistics with the help of SPSS version 23 and strata 14 software. The descriptive statistics used include frequency distribution, percentages, and weighted mean. The result of hypothesis one revealed that the socio-economic characteristics of the members of the women agricultural cooperative have significant influence on the use of extension services. It is concluded that the socio-economic characteristics of the women had a significant effect on their use of the extension services. The study recommended that; women farmers should hold unto education and training for better understanding of extension services and programmes.

Keywords; Extension, Agriculture, Socio-economic, Women, Cooperatives.

Introduction

Agriculture remains the nation's main economic bedrock, employing 70 – 80 percent of the total population, mostly on a subsistence level (Asiabaka & Owens, 2002). According to Agbamu (2005), sequel to the food situation in many developing societies, which is predominantly agricultural, finding means of raising productivity among the rural poor in these countries has become the most urgent problem confronting the International development community today. Agricultural development implies a shift from traditional methods of production to include new improved technological components such as new varieties, cultural practices, commercial fertilizers and pesticides, as well as new crops and new farming systems

(Agbamu, 2005). Consequently, a wide range of policies and approaches have been formulated in most African countries (Nigeria inclusive) to reverse the worsening food and agricultural trends towards sustained agricultural growth.

Cooperatives are the most effective vehicles for efficient mobilization of production resources and accelerated rural development. In Nigeria, majority of the agricultural cooperatives at different levels are multipurpose in their function. Not only do they operate banking business, they also deal with other support services such as input supply, marketing and purchasing which are critical to agricultural development (Abdulquadri & Mohammed 2012). Through cooperatives, farmers could pool their limited resources together to improve agricultural output, and this will enhance socio-economic activities in the rural areas (Ebonyi & Jimoh, 2002).

The extension agents have to be made available, for imparting new technique and idea, to enhance their production. Cooperatives in general, offer its members an improved bargaining power with respect to services such as production, storage, processing and transportation which is capable of influencing market value and the members produce. The better the quality of value added to farm produce, the more farmers will be eager to make sales through their agricultural cooperative societies. This is because, it is possible to maintain services such as storage, extend credit, processing and transportation which a single farmer cannot make or achieve outside being in a group or cooperative (Bob Igwe, 2006).

The agricultural extension services operate from the back drop belief that increased agricultural productivity depends primarily upon the acceptance of improved cultural and technological changes at the rural farm level and that peasant farmers can achieve higher farm yield only if they adopt recommended scientific farming techniques in place of their traditional practices (Aphum & Obikhian, 2008). Unfortunately, these small scale farmers are subsistence farmers and use crude and traditional production techniques. This has contributed to the poor performance of the sector. Therefore, effective economic development strategy will depend critically on promoting productivity and output growth, particularly among small-scale producers since they make up the bulk of the nation's agricultural producers/farmers. In this regard, there are so many socio-economic characteristics that will enhance the recommended farming techniques in place of traditional method of farming. Some of these socio-economic characteristics range from age to farming experience.

Agricultural extension service facilitates the transfer of knowledge and good practices to farmers. The traditional agricultural extension is mainly done by an extension officer visiting a farmer or farmer field schools (Sanga, Kalungwizi, & Msuya, 2013). For the laudable objectives of agricultural extension to be achieved, extension agents have to play a vital role as they are responsible for transferring useful information necessary for "change" to the farmers (Oladimeji 2004).

Nigerian agricultural system has not been living up to expectations, despite the wide range of policies, programmes and approaches that have been formulated for enhancement and sustenance of agricultural growth. In Nigeria, there is a growing advocacy for achieving or finding appropriate institutions that will be used to organize millions of farmers towards attaining the goals of maximal productivity, sustainable food security and expanding the opportunity for agricultural contribution to the nation's Gross Domestic Product (GDP).

Over the years, Nigerian rural farmers depend on indigenous or local knowledge for farming system. Such knowledge refers to skill and experience gained through oral tradition and practice over many generations, (Oyeoro, Adepogu, Oyewo & Adigun (2017). The acquisition of such generational skill by the rural farmers, as observed by Obidike, (2011) has not helped to improve agricultural yield. Therefore, all that is witnessed in the rural agricultural system range from the emergence of disease resistant weeds and pests, old farm implements, poor quality fertilizers, among others, leading to poor farm yields (Obidike 2011). Thus, this suggests the need for agricultural extension services delivery to the rural farmers for an improved farming system that will surely bring about improved performance in their farm enterprise.

The advocacy for agricultural extension services is yet to solve the major problem of how to develop appropriate organizational structures and platforms to mobilize and induce farmers in the agricultural sector, particularly women to greater productivity (Julie, 2014).

Farmers organization such as cooperatives have in recent times served as a veritable channel of delivering extension services, thus increasing and enhancing agricultural productivity (Onugu & Abdulahi, 2012).

According to Julie (2014) illiteracy (low educational background) high cost and inadequate awareness, trusts, as well as corruption have been identified as barriers hindering full use of extension services by women farmers. Women farmers in the technological, commercially- inclined and globally- integrated era of agriculture have little or no access to agricultural information provided by the extension officers (Julie, 2014).

Thus, this necessitates the need to investigate the socio economic characteristics of women cooperative organization as determinants of their use of agricultural extension services through their cooperative societies. Noteworthy also, that many works on literature have paid more attention to awareness of women on agricultural extension services, but little or none exist in understanding the extent of actual use, knowing that not all farmers that know or try an innovation adopt it.

Therefore, on this premise, the researcher provides answers to the pertinent questions that surround women's level of use of agricultural extension services that bother on

what their socio economic characteristics are and what influence it has on them and, their actual level of use of agricultural extension services in the study area.

Objectives of the Study

The broad objective of the study is to assess the socio-economic characteristics of women cooperatives as determinant of their use of agricultural extension services in South- East, Nigeria. The specific objectives are to:

- (i) Describe the socio-economic characteristics of the members of the women agricultural cooperative in Southeast, Nigeria.
- (ii) Determine the influence of the socio-economic characteristics of the members of the women agricultural cooperatives on their use of Agricultural Extension Services (AES).

Hypothesis of the Study

H₀: Socio- economic characteristics of members of the women agricultural cooperatives have no significant influence on their use of agricultural extension services in South-east, Nigeria.

H₁: Socio- economic characteristics of members of the women agricultural cooperatives have significant effect on the use of agricultural extension services in South-east, Nigeria.

Review of Related Literature

Review of related literature is discussed under the following sub-headings:

Conceptual Review

Women and Agriculture

Women have always played an important role in agriculture, undertaking a wide range of activities relating to food production, processing and marketing. Beyond the farm, women play a key role in land and water management in all developing countries. Women are most often the collectors of water, firewood and fodder (Commonwealth 2001). The key role played by women in agriculture was in the past largely unacknowledged in government statistics and decision making. This situation has started to change over the last two or three decades and much has been achieved in giving recognition to the importance of women in the agricultural sector in many parts of the developing world (World Bank, 2001). These factors have eroded gains and threatens a return to the situation where women's role is not fully recognized, and where gender blind policies and programmes fail to address the needs of women farmers (Commonwealth 2001). There also remain a number of areas where progress in advancing gender equality has not been significant and which represent challenges for the future. These include women's lack of access to land, resource entitlements and inputs such as credit, technology, the limited role played by women in planting and the formulation of policy in the sector .Women have also had less contact with extension services than men and generally use lower levels of technology because of

problems of access, cultural restrictions on the use or lesser interest in doing research on women's crops and livestock (World Bank, 2000). Nevertheless, women had traditionally valuable income through the processing of food at the household level for sale, but there are severe constraints on the expansion of this due to lack of information about markets, the absence of cold storage facilities, packaging technology and inability to obtain credit. These limitations are now understood and one challenge is to foster this business acumen and to encourage small-scale agro-processing (World Bank, 2000). Rural women play crucial roles in agricultural activities, in increasing food and nutrition security, as farmers/producers, workers and entrepreneurs. For example, because of legal and cultural constraints affecting land inheritance, ownership and use, worldwide, fewer than 20 percent of land holders are women. (FAO, 2011). In every Millennium Development Goal (MDG) indicator for which data are available, rural women are less than rural men and worse than urban women and men (Inter-Agency Task Force on Rural women, 2012) Obstacles to women's active participation are often structural and most are rooted in socio-cultural norms at the community and house hold levels. In the overwhelming majority of cases, men are the nominal owners of household assets and are recognized as such by law and custom. As a consequence women do not have equal access to benefit and income. This lack of access further weakens women self-confidence, resulting in women seldom reaching prominent positions in mixed cooperative and market-based agriculture (IFAD, 2012).

Yemisi and Aisha (2009) noted that women shoulder the primary responsibility for food security in Africa, yet development agencies have devoted minimal resources to researching the impact of their agricultural policies and new techniques on the well-being of African's women farmers. The supporting argument is that women are integral part of the African farming structure and that the dominant agricultural policies developed for Africa, with the disproportionate involvement and influence of external expert have ignored this gender dimension at a very real cost to African Agriculture and to gender equity within the continent (Yemisi and Aisha, 2009).

Chambers (2005) emphasized that the institutional reality remains that of operational inattention to gender issues in agriculture and related areas such as transport and micro finance. A disturbing feature of this inattention is that it co-exists with public statements that actively promote participation and consultation as part of the development agenda. Women have begun to make major demands for their participation and inclusion in the policy and economic process relevant to agriculture. Indeed, they have started to develop and promote local expert materials in the field of agriculture (Yemisi and Aisha, 2009). Through these materials being those which emerge out of consultation with women farmers on their needs and opportunities, we now know from existing evidence that there are gender differentiations of immense dimensions within African agriculture. Nevertheless, the position and capability of women meeting, the challenges of agricultural development cannot be over

emphasized. Women make significant contribution to food production and processing, but men seem to take more of the farm decision and control the productive resources. In Nigeria, women play dominant role in agricultural production, their active participation in African agriculture is also not new. This was confirmed by a study financed by the UNDP, which revealed that women make up 60% - 90% of the agricultural labour, depending on the region and that they produce two- third of food crops (Yemsi and Aisha, 2009).

They opined that beyond politics, the broad domains involving women of various classes are agriculture, urban workplace, the law and education. Women contribute tremendously to agricultural output but unfortunately, they hardly, until recently benefited from agricultural incentives and innovations because of economic suppression, social and traditional practices which undermine the constitutional provisions on the equality of men and women. (Yemsi and Aisha, 2000).

Agricultural Extension Services

Agricultural extension has been defined in different forms and ways by different authorities and experts, all endearing on the improvement of the standard of living of the people. Fisher (2002) defined extension as a system of education extending beyond the classroom to individuals on farms and is available to every member of the family. Agriculture for Impact (2018) defined Agricultural extension as the application of scientific research and knowledge through farmers to agricultural practice. Simply put, it is the delivery of information inputs to farmers. He went further to opine that the role of extension services is invaluable in teaching farmers how to improve their productivity. Extension is also critical to move research from the lab to the field and to ensure a return on investment in research by translating new knowledge into innovative practices. Montpellier (2016) opined that the UN High-Level Panel of Experts on Food Security and Nutrition (HLPE) argue that “extension systems need full attention and investments from governments and the donor community.” Agricultural extension started as just extension with the aim of disseminating information to people who were not privileged to taste the four walls of the classroom. Extension was first used in connection with education over 150 years ago to describe the method of spreading knowledge. Okechukwu (2009) opined that Agricultural extension can be defined as an advice and assistance given to the farmers and his families through educational procedures on new farming methods and techniques in order to improve their production efficiency and income, bettering their level and uplifting the education and social standard of the farmers.

Essentially, agricultural extension provides farmers the scientific knowledge so that they could solve their problems Okechuku (2009).It is also the primary means of change, the reason for change, the value of change, the results you can achieve, the process by which it is arrived at and also the uncertainties inherent in this change. It helps the farmers to learn about what alternatives that exists in farming so that they

can choose the best alternative for themselves. Agricultural extension agents help the farmers to discuss and air the conditions under which they do their farming process; to obtain a clearer inside to their problems and encourage farmers decide how to overcome their problems either individually or collectively in order to achieve improved yield and living standard.

Again, agricultural extension is an approach that aims to provide uninformed farmers and their households with relevant information about new farming practices and techniques that can boost agricultural production and improve living standards (Sheriff, 2018). He went further to say, that it adopts education techniques in rendering assistance to farmers. Educational assistance or advice so acquired enables farmers to develop socially and understand how they can make agriculture a lasting source of substantial income. Agricultural extension in its global conception was indicated with the intent of passing information to farmers who were not literate or who did not have any access to formal education. He went further to say that about two hundred (200) years ago, the word extension was first used in referring to a formal means of disseminating useful information and transferring knowledge.

Sheriff (2018) continued to say that today agricultural extension goes a great length to involve the transfer of scientific knowledge. Farmers require understanding the use of modern technology. Undoubtedly, farming is associated with problems and for local farmer's comprehensive information on the use of modern technology. In this regard, agricultural extension has gained ground everywhere in the world as a helpful approach to solving farming problems.

In addition, to its basic purpose, agricultural extension integrates innovation with agriculture in a way intended to promote agriculture and make it a lasting solution to crises such as food shortage and low level of agricultural production. Moreover, agricultural extension brings about the awareness of farmers, a variety of farming alternatives from which they can select their preferences. Frankly, the agricultural extension comes with a number of advantages, most of which are targeted at farmers. It is said that some of its advantages, are but not limited to: giving distinct insight into how farming problems may be solved; helping farmers connect with one another to discuss the conditions surrounding their activities, raising farmers' standard of living through collective reasoning and disseminating information farmers need to diversify from crude farming to modernized farming.

The crucial role of agricultural extension (i.e. farmer's education) in the social and economic development of the nation cannot be over emphasized. Never before in Nigerian history has the necessity for educating and raising the productive capacity of our farmers been of such importance as it is today. Increased agricultural productivity depends primarily upon the acceptance of cultural and technological changes at the rural farm level. Thus, for Nigeria agriculture to improve, our farmers have no alternative but to learn and adopt recommended scientific farming techniques in place

of their traditional practices. For farmers to respond positively to new ideas, they must be properly educated on how best to apply the new ideas or practice to their farming activities. Nigerians cannot achieve increased agricultural productivity on rural farm level, except through the provision of basic agricultural education, particularly, the non-formal or extension type that will help move millions of the farmers from traditional to progressive farming, thereby improving the overall quality of rural life. However, it is not easy to define agricultural extension in a short concise phase or statement. Any attempt to define it properly would involve lengthy explanation of several principles and philosophies. Different authorities and experts have defined extension in different forms and ways, all endearing on the improvement of the standard of living of the people. Fisher (2002) defined extension as a system of education extending beyond the classroom to individuals on farms and is available to every member of the family Asiabaka, Anaeto, Nnadi, Ajaero , Aja , Ugwoke, , Ukpongson and Onweagba, (2012) defined extension as involving the conscious use of communication of information to help people form sound opinions and make good decisions. They explained extension systematically as a process which helps farmers to analyse their present and expected future situations, helps farmers to become aware of the problems which can arise in such an analysis, increase knowledge and develop into problems and helps to structure farmer's existing knowledge, helps farmers to acquire specific knowledge related to certain problems, solutions and their consequences so that they can act on possible alternatives, helps farmers to evaluate and improve their own opinion, forming and decision making skills.

Asiabaka (2002) tried to look at extension from modern perspective and thus explained it from the aim, which seek to accomplish, which is to teach both the rural and urban clientele how to determine their problems and be able to rise to such problems, using their own resources. He further explained extension as having three important dimensions namely: educational components, which involves changing the behavior complex and attitude of the people, economic dimension which includes, increased income of the clientele, increase crop yield, better financial management, better methods of food preservations, social dimension, which also includes improved health of the clientele, leadership development, better grooming, development co-operation, increased zeal for development (Asiabaka *et al.*, 2012).

Modern agricultural extension work in Nigeria today covers a wide spectrum of services which include, Improvement in production, marketing, storage, processing, Fish farming, Agro-forestry, input supply and distribution, Manpower development, Home Economics/Women- in- Agriculture, irrigation and management, Farm mechanization, Erosion control, Livestock management, Human resource/development, Administration/ management, Programme planning and evaluation, Youth development programme etc. (Anaeto, 2003).

Materials and Methods

Research Design

Design in research connotes the approach researcher intends to take in carrying out her study. For the purpose of this study, survey research design was employed.

Area of the Study

The area of the study is South-east Nigeria. It consists of five States, namely, Anambra, Imo, Enugu, Abia and Ebonyi. This area that was referred as Biafra during the civil war has 101 Local Government Areas that are split into 346 communities. Okechukwu (2014) had it that South-east of Nigeria was carved out of East Central State which was one of the twelve States created in Nigeria at the emergence of the Nigerian civil war in 1967. It is bounded in the east by Akwa Ibom and Cross River States, in the north by Benue and Kogi States, in the west by Edo and Delta States and in the south by Rivers and Bayelsa States. The area is inhabited by the Ibo race and the language is Igbo, though English is widely spoken and used as official language in governance. They are predominantly Christians. The Ibos are very daring, competitive, hard-working and enterprising. They can be found doing business virtually in all parts of the world. They are renowned in literature for commerce, adventure and dexterity. The population of the area, according to 2006 census, is 28,415,006. Literacy level of inhabitants stood at 38%, while 51% of the population are female. The region is arguable the most vibrant geographical zone in Nigeria, and it has the least poverty rate in the country. The region is blessed with natural minerals such as crude oil, coal, limestone, aluminium etc. The arable land made it a beacon of agriculture and unique in production of palm oil, cassava, yam, cocoyam, cashew nuts, vegetables and different kinds of fruits. Apart from numerous rivers which make fishing interesting for inhabitants, the Onitsha, Enugu, Aba and Nnewi trade clusters made the region a beehive of commercial activities. Interesting cities in the region include Awka, Enugu, Owerri, Umuahia and Abakaliki. Sixty percent of the inhabitants live in rural areas, and over 70% of rural dwellers depend on their farm for survival. Majority of these rural dwellers are women who formed themselves into cooperatives in order to access market opportunities. There are many women cooperatives in the area and they assist their members to access credit, inputs, processing of farm produce and marketing. Agricultural Development Programme offices are also located in various parts of the region, rendering extension services to individuals and corporate farmers.

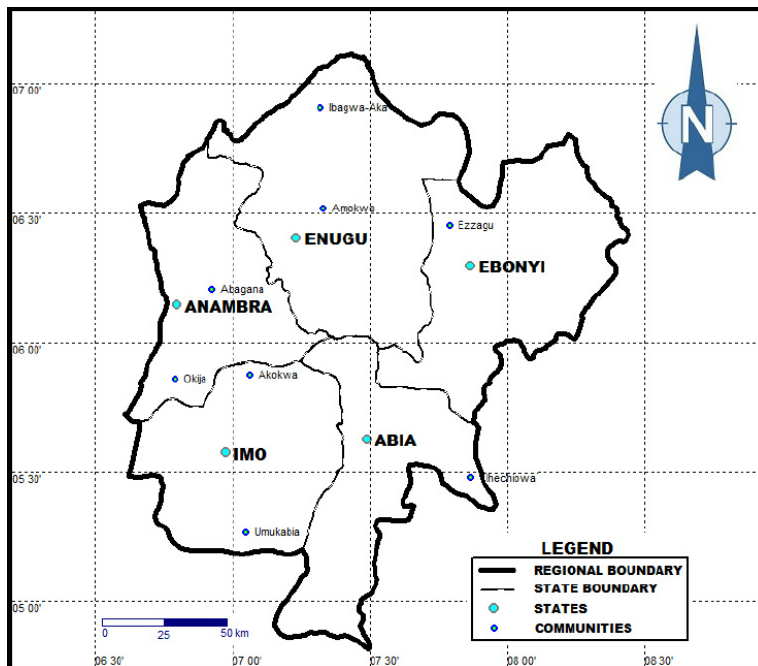


Fig.1: Map of Southeastern Nigeria showing the states
 Source: World Igbo Congress Foundation (WICF),. 2014

This study covered the women agricultural co-operative societies in the South-east of Nigeria, made up of five states viz: Abia, Anambra, Ebonyi, Enugu and Imo States. According to Cooperative Departments from the five State capitals, there were 28,410 agricultural registered cooperatives in the area of study, out of which 6455 were women cooperatives. These women agricultural cooperatives had a total membership strength of 133,841. Therefore the 6,455 women agricultural cooperatives with their membership strength which was 133,841 constituted the population of this study.

Sample Size Determination and Sampling Technique

The number of women farmer’s cooperatives in the five (5) States of South-East Zone was six thousand four hundred and fifty-five (6455) with the total membership strength of one hundred and thirty three thousand, eight hundred and forty-one (133,841). To get the sample size, the researcher used the Taro Yamane formula of

$$n = \frac{N}{1 + N(e)^2}$$

- Where n = sample size
- N = population of the study
- e = error of margin taking at 5% level.
- n = $\frac{133,841}{1 + 133,841 (5\%)^2}$
- = 133,841

$$\begin{aligned}
&= \frac{1+133,841 (0.5)^2}{133,841} \\
&= \frac{1+133,841 (0.0025)}{133,841} \\
&= \frac{1+334.6025}{335.6025} \\
&= \frac{133,841}{398.8081138} \\
n &= \text{approximately } 399 \text{ respondents}
\end{aligned}$$

The sampling strategy that was used in this study was multistage and proportional sampling technique. Multistage sampling refers to a sampling method where the sampling is carried out in stages using smaller sampling units at each stage. Proportional sampling technique is a method where the samples are a proportional distribution across all units.

Stage one: Two Local Governments in each of these five States that were agrarian were selected. This is because the study is about agriculture and better result will be achieved if efforts are focused on agrarian communities where agricultural production takes place.

Stage two: Women cooperatives in these agrarian local governments were randomly selected. Efforts were made to include only women cooperatives that were functional and had years of contacts with agricultural extension workers.

Stage Three: Members of women agricultural cooperatives who have had at least five years contacts with extension officers were selected. This is shown in Table 3.1.

Table .1: Distribution of women agricultural cooperative members selected from each state in South-East.

State	No. of Cooperatives	No. of members	No. of members selected
Anambra			
Ayamelum	9	145	44
Awka North	10	172	52
Imo			
Orlu West	8	138	39
Owerri West	9	153	47
Enugu			
Aninri	10	197	51
Udenu	8	129	36
Ebonyi			
Ivo	7	111	29
Izzi	8	125	33
Abia			
Bende	6	84	27
Isiala Ngwa	7	112	41
Total	82	1366	399

Data were collected from basically primary sources. The primary data employed pretested and structured questionnaires set for recording information, and data were elicited from the cooperators (executives and members) who were the respondents for the study. However relevant secondary information was elicited from texts, journals, learned articles and websites of reputable institutions.

The copies of questionnaires were administered by the trained research assistan. Only 379 copies were diligently filled and returned.

Method of Data Analysis

The study utilized a combination of analytical tools such as SPSS version 23, Excel and STATA 14.0. Statistical tools used to achieve the stated objective and hypothesis to the study were descriptive statistics, Ordinary Least Square regression model, and inferential statistics. Descriptive statistics which includes frequency, percentage, and mean were used to achieve objectives 1 while Objective 2 was achieved with Ordinary Least Square regression model, while the t-ratios from the results of the four functional form of multiple regression were used to ascertain the significance of hypothesis one.

4. DATA PRESENTATION AND ANALYSIS

Socio-Economic Characteristics of the Women Agricultural Cooperative Members in the South- Eastern Zone of Nigeria.

The Socio-Economic Characteristics of the Women Agricultural Cooperative Members in the South Eastern Zone of Nigeria is presented in Table 2.1.

Table 2.1: Distribution of Women Agricultural Cooperative Members in the South -Eastern Zone of Nigeria according to their Socio-economic Characteristics (n = 379).

S/n	Variables	Frequency	Percentage (100%)	Mean (x)	Standard Deviation
1	Age (Years)				
	20 - 29	36	9.5		
	30 - 39	108	28.50		
	40-49	143	37.70	42.60	10.00
	50 - 59	76	20.10		
	60 years and above	16	4.20		
2	Educational Qualification				
	No Formal Education	20	5.30		
	First School Living Certificate	51	13.50		
	Senior Secondary Certificate	156	41.20		
	ON D/NCE	79	20.80		
	B Sc/HND	61	16.10		
	Masters of Science and above	10	2.60		
	Mass Education	2	0.50		
3	Marital Status				
	Married	272	71.8		
	Single	67	17.7		
	Widow	36	9.5		
	Single Mother	4	1.1		

Source: Computed from Field Survey Data, December 2021.

The Socio-Economic Characteristics of the Women Agricultural Cooperative Members in the South-Eastern Zone of Table 2.1 include Age, Education, Marital Status, Occupation, Family size, Income, Membership Experience, Farming Experience, and Farm size.

Age: The Table shows that majority (37.70%) of the women are within the age bracket of 40 – 49 years, while the remaining 28.50%, 20.10%, 9.50%, and 4.20% are within the age bracket of 30 – 39 years, 50 – 59 years, 20 – 29 years, and 60 years and above respectively. The mean age was found to be 42.60. The women farmers are in their active farm age, and so adoption of agricultural innovation will be easy in the study area. This is totally in agreement with Nuhulet *al*,2014 in their study on barriers to women performance in agricultural development in Bauchi Local Government area of Bauchi State.

Level of Education: The Table shows that majority (41.20%) of the women attended secondary school and have senior secondary certificate, while the remaining 20.80%, 16.10%, 13.50%, 5.30%, 2.60%, and 0.50% had Ordinary National Diploma/National College of Education, Bachelor of Science/Higher National Diploma, First School Living Certificate, No Formal Education, Masters of Science and above, and Mass Education respectively. From these result, it becomes very clear that women farmers in the study area are not illiterate and so, they can easily assimilate what they are being taught. The women are not illiterate as reported by Adamu (2014), in her study on extension users’ view on alternative sources of fund for extension services in Ogun State.

Marital Status: The Table shows that majority (71.80%) of the women are married, while the remaining 17.70%, 9.50%, and 1.10% are single, widows, and single mothers respectively. This is in agreement with Ugbaja (2014), in his study on the provision of credit and loan facilities by Nigerian agricultural cooperative and rural development bank Ltd (NACRDB) to farmers.



Figure 1: Occupation of Cooperative Women in the South- East Zone.

Occupation: figure 1 shows that the majority (44.60%) of the women’s main occupation was farming, while the remaining 29.00%, and 17.90%, were civil service and trading respectively. 5.30% of the women are unemployed by either government or private establishment, and 3.20% of them were retired from active service. The high numbers of civil servants into farming connotes the fact that farming was the only other engagement public servants prefer to do. The majority of the women were engaged in farming activities as their main occupation was in agreement with Bonabana-Wabbi (2012) in his study on the socio-economic factors influencing adoption of improved seedling among farmers in the Sahehe zone of Borno State.

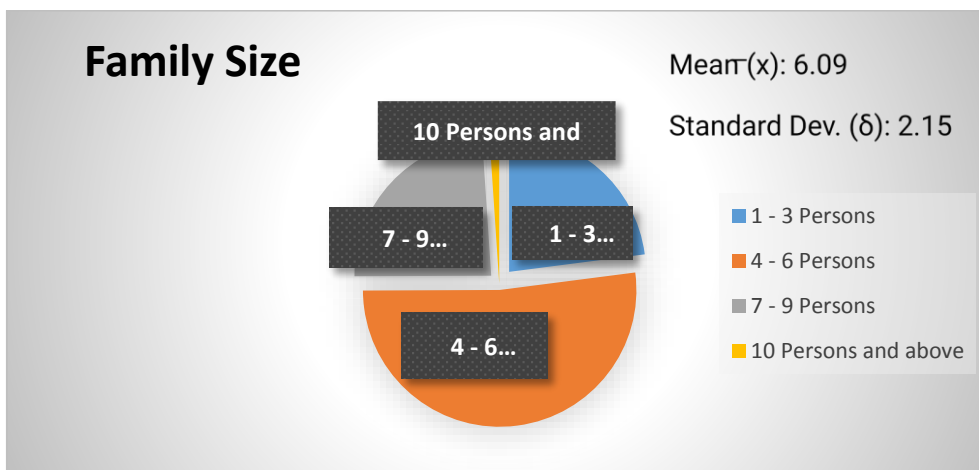


Figure 2: Family size of Cooperative Women in the South East Zone.

Family size: Figure 2 shows that majority (52.00%) of the women have a family size of 4 – 6 persons, while the remaining 24.00%, 23.00%, and 1.00% have a family size in the bracket of 7 – 9 persons, 1 – 3 persons, and 10 persons and above respectively. The mean family size was found to be 6.09. Large family size supplies household labour which helps to save cost incurred in hiring labour for farming activities. This is not in line with Nwalieji & Ajayi (2009).

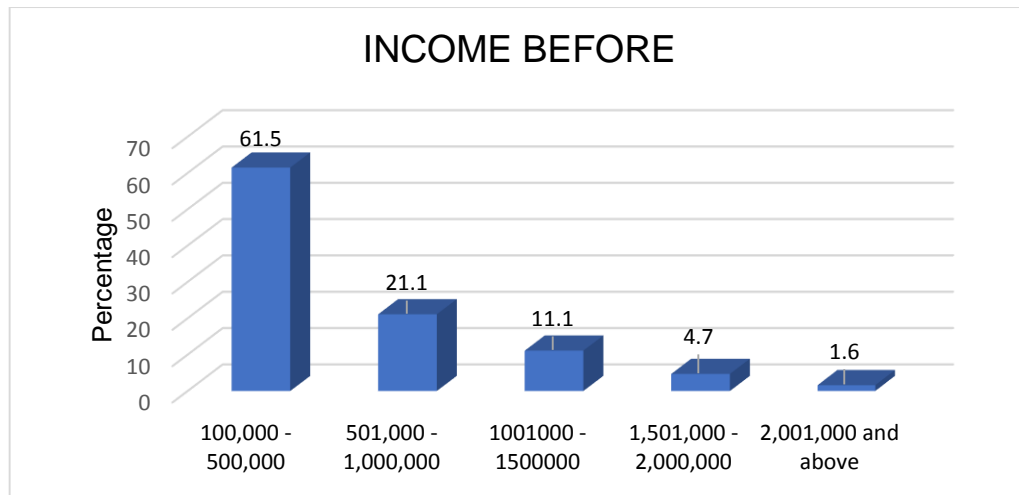


Figure 3: Income range of Cooperative Women in the South -East Zone before the use of agricultural extension service.

Income of Women before the use of the Agricultural Extension Services: Figure 3 shows that majority (61.50%) of the women’s income before the utilization of agricultural extension in south-east were within the range of 100,000 – 500,000 thousand Naira only, while the remaining 21.10%, 11.1% 4.7)% and 1.60% had an annual income range of 501,000 – 1,000,000, 1001,000 – 1,500,000, 1,501,000 – 2,000,000, and 2,001,000 and above respectively. the mean income before was found to be ₦600,192.61.

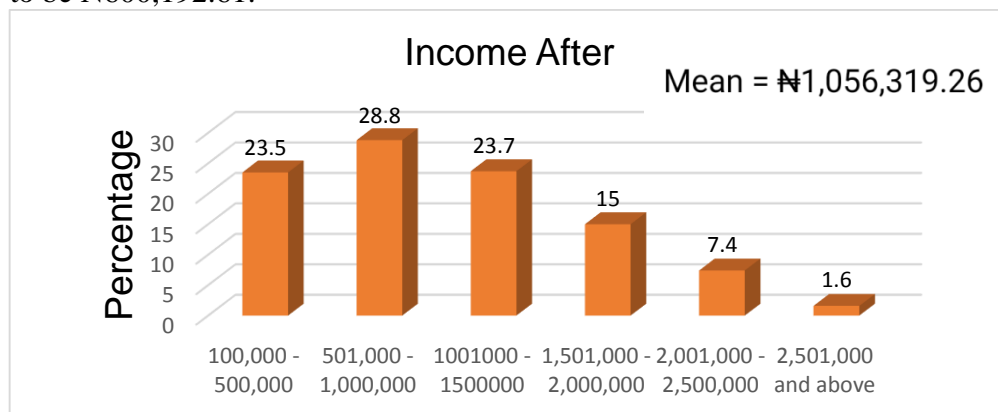


Figure 4: Income range of Cooperative Women in the South- East Zone as a result of extension service.

Income of Women as a result of the use of Agricultural Extension Services: Figure 4 shows that (28.80%) of the women’s income as a result of agricultural extension service was in the bracket of 501,000 – 1,000,000 (Naira), while the remaining 23.70%, 23.50%, 15.00% and 7.40% had their income in the bracket of 1001,000 – 1,500,000 (Naira), 100,000 - 500,000 (Naira), 1,501,000 – 2,000,000 (Naira), and 2,001,000 – 2,500,000 (Naira) respectively. None of the women had their

income within the range of 25,001,000 and above. The mean income was found to be 1,056,319.26 (Naira). This shows that the programmes had clear and physical evidence in the livelihood status of the women. Thus, using difference in mean, the use of agricultural extension services contributed extra N456,126.65 (75.80%) to the income level of the women in south- east.

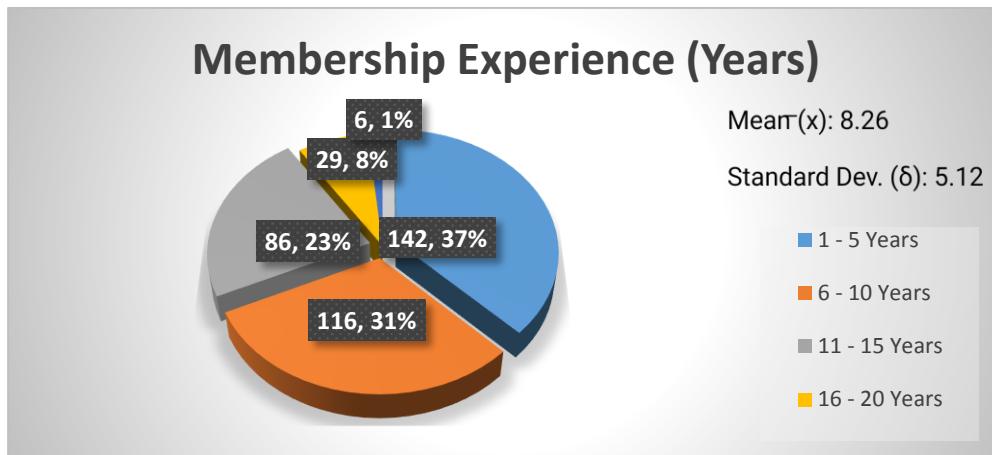


Figure 5: Membership Experience of Cooperative Women in the South -East Zone.

Membership Experience: Figure 5 clearly shows that majority (37.00%) of the women have had a membership experience in the bracket of 1 - 5 years, while the remaining 31.00%, 23.00%, 8.00%, and 1.00% have a membership experience in the bracket of 6 – 10 years, 11 – 15 years, 16 – 20 years and 21 years and above respectively. The mean membership experience was found to be 8.26. There is a mismatch with 15 years reported by Adamu (2014) in Ogun State.

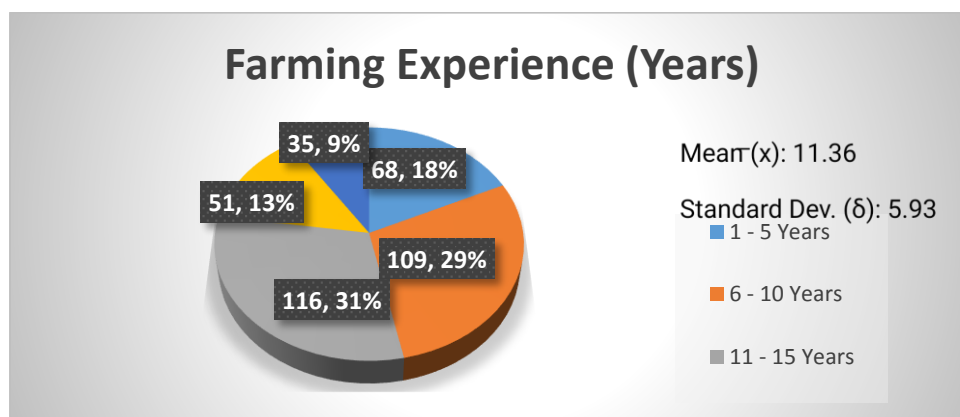


Figure 6: Farming Experience of Cooperative Women in the South- East Zone.

Farming Experience: Figure 6 clearly shows that majority (31.00%) of the women have had a farming experience in the bracket of 11 -15 years, while the remaining

39.00%, 18.00%, 13.00%, and 9.00% have a farming experience in the bracket of 6 – 10 years, 1 – 5 years, 16 – 20 years and 21 years and above respectively. The mean farming experience was found to be 11.36. This means that women farmers in the zone have better experience in agriculture, though this might pose a challenge to the use of extension services being rendered to them.

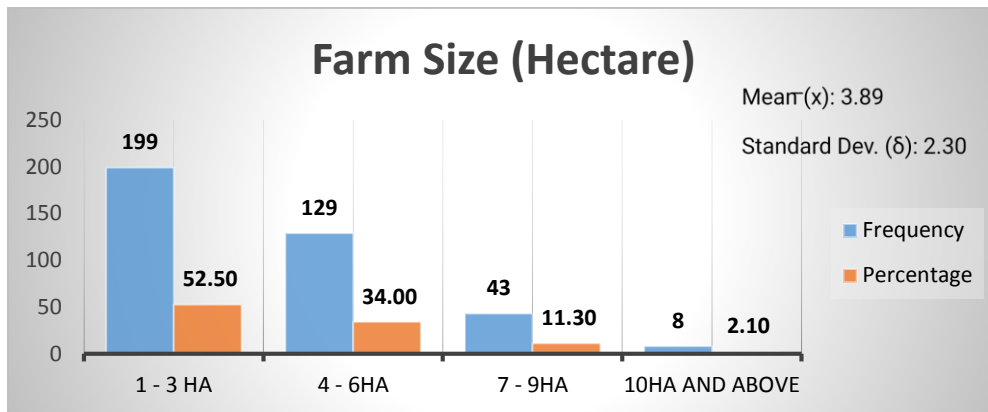


Figure 7: Farm Size of Cooperative Women in the South- East Zone.

Farm size: Figure 7 shows that majority (52.50%) of the women have a farm size in the bracket of 1 – 3ha, while the remaining 34.00%, 11.30%, and 2.10% have a farm size in the bracket of 4 – 6ha, 7 – 9ha and 10ha and above respectively. The mean farm size was found to be 3.89ha. This is justifiable as most agricultural programmes encourage the farmer to have contiguous land through the land development scheme. Agricultural mechanization is easier to adopt for practice on contiguous land. This was not in agreement with Nwalieji & Ajayi (2009) as the mean farm size of 3.82ha was far higher than their mean farm size of 0.88ha.

Socioeconomic Characteristics and effects on the use of Agricultural Extension Services (AES) among women members of Agricultural cooperative South-East
Table 2.2 Socio-economic characteristic effect on extension use in South-East

Variable	Linear	Exponential	Semi Log	Double Log
Intercept	3.57905 (19.10)	4.380602 (6.23)	1.259638 (22.81)	1.475716 (7.12)
Age (X ₁)	0.004854 (1.62)	0.245358 (2.07)*	0.0012864 (1.47)	0.064225 (1.84)
Level of education (X ₂)	0.064097 (2.80)*	0.237086 (3.39)**	0.0171816 (2.54)*	0.0652342 (3.17)**
Marital status (X ₃)	0.049597 (1.38)	0.107962 (1.76)	0.0191276 (1.81)	0.0392482 (2.17)*
Primary Occupation (X ₄)	-0.058957 (-2.36)*	-0.128431 (-2.46)*	-0.0147036 (-1.99)*	-0.0328504 (-2.14)*
Family size (X ₅)	-0.031282 (-2.51)*	-0.103426 (1.93)	-0.0101988 (-2.77)*	-0.0346622 (2.17)*
Income (X ₆)	-1.63e-07 (-3.68)**	-0.129809 (-3.25)**	-4.32e-08 (-3.30)**	-0.034662 (-2.95)**
Membership experience (X ₇)	0.0136529 (1.02)	0.025249 (0.54)	0.0014577 (0.86)	0.016599 (1.05)
Farming experience (X ₈)	-0.003354 (-0.47)	0.040739 (0.76)	-0.000979 (0.47)	-0.0067794 (-0.47)
Farm size (X ₉)	0.013653 (1.03)	0.053165 (0.96)	0.003985 (1.02)	0.149418 (0.92)
R ²	0.1078	0.1092	0.0949	0.0964
F-Stat.	4.95**	5.03**	4.30**	4.38**
N	379	379	379	379

Source: Computed from Field Survey Data, December 2021.

Figures in parenthesis are t – ratios, * significant at 5%, ** significant at 1%.

The exponential function with the highest r^2 (0.1092), the highest number of variable significance and in conformity with the a priori expectation was chosen as the lead equation.

Thus; $Y = 4.380602 + 0.245358\text{LN}X_1 + 0.237086\text{LN}X_2 + 0.107962\text{LN}X_3 - 0.128431\text{LN}X_4 - 0.103426\text{LN}X_5 - 0.129809\text{LN}X_6 + 0.025249\text{LN}X_7 + 0.040739\text{LN}X_8 + 0.053165\text{LN}X_9 + 0.8908$.

The coefficient of multiple determinant R^2 (0.1092) indicates that 10.92% of the variation in the use of agricultural extension services (technology, advisory and facilitation) was explained by the joint action of the women farmers socio-economic

characteristics, while the remaining 89.08% unexplained was due to error beyond the control of the women farmers, and the F-statistics of 5.03** indicates that the results were normally distributed.

The coefficient of Age (0.245358) was positive and statistically significant at 5% level of probability, indicating that a unit increase in the age of women farmers in the area will increase to a greater extent the use of agricultural extension services by 24.54%. This is in agreement with Ajayi & Gunn (2009), but not in line with Ajah (2012).

The coefficient of Level of education (0.237086) was positive and statistically significant at 1% level of probability indicating that a unit increase/change in the level of farmer's education will increase to a greater extent the use of agricultural extension services by 23.71%. This is in agreement with Ajayi & Gunn (2009), but not in line with Ajah (2012).

The coefficient of marital status (0.107962) was positive and statistically not significant at either 5% or 1% level of probability. This finding indicates that a change in marital status among women farmers in South-East will not significantly affect the level of use of agricultural extension services in South-East.

The coefficient of Primary occupation (-0.128431) was negative and statistically significant at 5% level of probability, indicating that anyone additional change in the occupation of farmers, say from farming to trading will reduce to a greater extent the use of agricultural extension services by 12.84%. This could probably mean that farmers will now pay less attention to farming activities since their time will be more dedicated to trading than farming.

The coefficient of family size (0.103426) was negative and statistically not significant at either 5% or 1% level of probability. This implies that a unit increase in number of family size will not have a significant effect in the level of use of agricultural extension service. This is not in line with the *a-priori* expectation since large family size supplies labour to the farm.

The coefficient of Income (-0.129809) was negative and statistically significant at 1% level of probability, indicating that one unit increase in the income of farmers will reduce to a greater extent the use of agricultural extension services by 12.98%. When the income of farmers increases, they probably might be engaged in other income generating activities other than farming. This will affect the use of agricultural extension service. This was not in agreement with Nuhul *et al*, 2014 whose income had a positive coefficient.

The coefficient of membership experience (0.025249) was positive and statistically not significant at either 5% or 1% level of probability, indicating that if there is a unit increase in membership experience among women farmers in South-east, there will be no significant effect in the use of agricultural extension services.

The coefficient of farming experience (0.040739) was positive and statistically not significant at either 5% or 1% level of probability indicating that one year increase in farming experience among women farmers in South-east will not affect the use of agricultural extension services in the area. This finding is not in agreement with Nuhul *et al*, 2014. By *a-priori* expectation, it is expected that increase in farming experience will equally increase the use of agricultural extension services.

The coefficient of farm size (0.053165) was positive and statistically not significant at either 5% or 1% level of probability, indicating that a unit increase in farm size among women farmers in South-east, there will be no significant effect in the use of agricultural extension service in the area. This is not in line with the *a priori* expectation. Ideally, use of agricultural extension services is expected to increase with hectare increment.

Test of H_{01} ; Socio-economic Characteristics of Members of the Women Agricultural Cooperatives have no significant effects on their use of Agricultural Extension Services (AES).

Hypothesis one was tested from the t. ratio of regression result of objective two. Thus; hypothesis one (H_{01}) was rejected based on the variables that had a significant t-ratios and was accepted based on variables that were not significant at either 5% or 1% level of probability as shown in table4.5. Eze., Onwubuya, & Ezeh , (2010) suggest the need for extension training focus on socio-economic characteristic of women in order to improve their productivity and understanding of marketing opportunities, cost and benefits in the marketing process, especially among the variables that were significant in the study.

Table 2. 3: Decision table of the Hypothesis one

Variable	T – ratio	Decision
Age (X_1)	(2.07)*	Reject
Level of education (X_2)	(3.39)**	Reject
Marital status (X_3)	(1.76)	Accept
Primary occupation (X_4)	(-2.46)*	Reject
Family size (X_5)	(1.93)*	Accept
Income (X_6)	(-3.25)**	Reject
Farming experience (X_7)	(0.54)	Accept
Membership experience (X_8)	(0.76)	Accept
Farm size (X_9)	(0.96)	Accept
F – Stat.	45.03**	

Source: Computed from Field Survey Data, December 2021.

* Significant at 5% and ** Significant at 1% level of probability.

This chapter summarizes the findings of this study, thus providing the basis for drawing a conclusion on the product of the research and to make recommendations.

Summary of the Findings

The study was on socio economic characteristics of women agricultural cooperatives as determinants of use of agricultural extension services in South-East, Nigeria. Data were collected with a well-structured questionnaire from 399 randomly selected women farmers who are members of agricultural cooperative society in the study area. Data were analyzed using a combination of analytical tools such as Descriptive statistics, mean, multiple regression. The researcher found out that (37.70%) of the women were within the age bracket of 40 - 49 years with a mean age of 42.60 which implies that the women were still in their active farm age, and 71.80% of the women are married, while majority (41.20%) of them attended secondary school. Despite their level of education, the majority (44.60%) of the women were mainly farmers, with a mean family size of 6.09. not minding the family size, their mean income before the agricultural extension package was delivered; the annual income before the package delivery was 600,192,61 (Naira) and 1,056,319.26 (Naira) after the extension delivery respectively. The research also revealed that the mean cooperative membership experience was 8.26years and the mean farming experience was 11.36 years, with an average of 3.89 hectares on a contiguous base.

Conclusion

The socio economic characteristics of women cooperative organization as determinants of their use of Agricultural Extension Services, Cooperatives in South-East, Nigeria cannot be overemphasized as the results are evident to draw conclusion.. The women annual mean income increased from 600, 192,61 (Naira) to 1,056,319.26 (Naira) as a result of the extension interventions. Conclusively; the researcher agrees that socioeconomic characteristics of the women had a significant effect on their use of the extension services based on those variables that were significant (Level of education, marital status, Main Occupation, Family size, and Annual income),.

Recommendations

The following recommendations were made based on the findings;

- (i) Women cooperative farmers should hold onto education and training, for better understanding of extension services and programmes which will provide assistance to them for improved agricultural production..
- (ii) Women agricultural cooperative members should be granted more access to farmlands for increased agricultural production for agricultural mechanization is easier to adopt on contiguous land.

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SUSTAINABILITY OF COOPERATIVES AND DONOR SUPPORT: THE 'WAIT-AND-SEE' ATTITUDE OF MEMBERS.

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Abstract

The recognition of Cooperatives as a crucial means of promoting sustainable livelihoods which is strongly linked with income-generation activities for individuals and the community has been widely acknowledged. Hence, cooperatives are exploring means to guarantee that their entities will last long to continually provide members need and create value consistent with the long-term preservation and enhancement of financial, environmental and social capital, even, in today's competitive environment. Trends such as climate change, globalization, demographic change and social inequity have created a significant challenge to the traditional business model with its focus on owners' value. Hitherto, the sustainability of cooperatives becomes imperative, especially in rural scenarios with shocking issues of dormancy, moribund, extinctions and mismanagement which are widespread. The sustainability of cooperatives connotes "keep the business" or "future-proofing" which involves equity between members and equity within members. But donor support (government paternalism) to cooperatives has extremely challenged the goals of economic and social development of these enterprises hence members attitude of "wait-and-see" syndrome not trying to tap into a fresh revenue stream. This attitude of members no doubt is mostly occasioned by lack of education and training, and effective membership participation. This research work finds its crux through genuine efforts to contribute knowledge to current discourse. The paper is a descriptive study which anchors on theoretical considerations.

Keywords: Sustainability; Cooperatives; donor support; attitude; theory of sustainability vision.

Introduction

Organisations nowadays confront significant hurdles as a result of the business-related organisations' dynamic and unpredictable environment. This displays that the context in which organisations exist has changed. Trends such as globalization, demographic change, social inequity and climate change have created a significant challenge to the traditional business model with its focus on owners value (Agbayani – Caballero, 2021; Wales, 2013). Sustainability, therefore becomes the driving force that significantly helps the organisation survive in their various industries. This appears to be the target of organisations in today's aggressive environment, especially cooperative enterprises. Cooperatives are member-owned, democratically controlled businesses that put the needs and goals of their members first. This enables members

to build long-lasting businesses that provide long-term employment and prosperity (International Cooperative Alliance [ICA], 2021). Cooperatives serve as notable economic players that contribute to sustained economic growth both in developed and developing countries. However, in certain claims especially in the sub-Sahara Africa region, many have been and are still being controlled by the government, thus undermining the sustainability of these grassroots opportunities and inherently designing disloyal membership support who stays calm and delay engaging in a fresh income stream.

Cooperative sustainability is a business strategy for building long-term value that considers how a particular cooperative functions in the ecological, social, and economic environment (Candemir, et al, 2021). Sustainability connotes the ability between generations and equity within generations. This assertion argues that the goals of any cooperative economic and social development must be defined in terms of sustainability (Wanjare, 2017). The concept of sustainability for a while now, has been applied in the context of interaction between humans and nature (Jacobo – Hernandez et al, 2021), indicating that the longevity of cooperative entrepreneurship lies in the interaction with members and concerns for the community which is pronounced in cooperative principles. The sustainability of cooperatives, therefore, is believed to be a toner to be more efficient, competitive and enhance economic surpluses for members. However, donor–support (government paternalism NGO supports has extremely challenged cooperative enterprises performance more against the rural units. This ignites a paradigm shift in the mindset of members, who are waiting always for the government for some sought of assistance. Probably, for a lack of appropriate knowledge of cooperative ideas and effective membership participation. This work finds its essence through genuine efforts to contribute knowledge to the current scenario.

Conceptual Classification

Sustainability of Cooperatives

Sustainability is on the acumination of a generative leap. Organisations all over the world are beginning to explore more sustainable ways of doing business probably due to the global climate emergency, so as to create favourable conditions, guaranteeing responsible behaviour and employment creation (Agbayani-caballero, 2021). The sustainability of cooperatives in rural communities, no doubt, will make for resilience and create an enduring impact. Hence, sustainability of cooperatives is not just environmentalism, it is an approach to creating long-term value by considering that purpose and actions are equally in financial, social and environmental concerns (Yakar-Pritchad, 2021). The sustainability of cooperatives in rural communities needs to be embraced by stakeholders as a responsibility (Radu, 2015 in Agbayani – Caballero, 2021). However, resources within and without are influential to the sustainability of rural cooperatives in terms of economic (access to affordable loans, donations to support livelihood); social (bonding together of members and

engagement in community concerns) and environment. Nevertheless, there exist various knowledge disciplines on the concept of sustainability, this paper considers the concept as the action that favours the achievement of cooperative objectives while also hitting a balance for society, the economy and the environment (Candemir, et al, 2021).

The sustainability of cooperatives is expected to create long-term owner/user value by seizing opportunities and managing risks from the triple pillars (economic, social and environmental development) and not being docile (Jayn, 2015).

The sustainability of cooperatives is influenced by the values of cooperatives, which is mostly hinged on self-help, mutual assistance and self-responsibility. Cooperatives in rural areas need to reinforce their sense of ownership to achieve long-term goals of self-reliance (Moon & Lee, 2021).

Cooperatives can adopt these strategies to ensure their sustainability.

- Building effective communication skills and management information system
- Offering services that fit members need
- Simplify procedures to reduce operational costs
- Achieving financial stability via the charging of appropriate interest rates and fees
- Developing apex institutional linkages
- Including cooperative education and training in the cooperative's normal services.
- Diversify loan products, policies and procedures (Adapted from Funds for NGOs. Funds for ngo.org)

Cooperatives and their Principles

As a type of social economic model, the cooperative seeks to address social needs and bring about systemic change as a consequence of social innovation. Cooperatives are "people-centred enterprises, jointly owned and democratically controlled by and for their members" to fulfil their common economic, social, and cultural needs and aspirations and seek to build a better community and world through cooperation unlike investors on owned firms [IOF] (ICA, 2021 in Ojiagu, 2023). Moon & Lee, 2021). Typically, the governance structure is what separates investor-owned businesses from cooperatives (Penge et al, 2018), and this is in decision – making process where all members have a voice in business matters. But, most times in the rural cooperatives there seems to be a lack of continued trust and confidence in their members hence the attitudinal syndrome of "wait-and-see". In addition, cooperatives voluntarily work together to provide services based on equality without public support (Renber, 2011 in Yakar-Pritchad & Caliyart, 2021), meeting that, it's most possible that in the theoretical definitions of cooperatives there manifest; the principle of user ownership; the ownership and financing of cooperatives is the responsibility of its users, not basically '*donor – support*'. The second is the control principle: the cooperative is controlled by its users, not by the government. The third is the user benefits principles:

the cooperatives share their benefits with their members according to their level of participation (Nilson, 1996). Hitherto, the seven (7) cooperative principles identified by the ICA (1995); (1) voluntary and open membership; (2) democratic member control; (3) member economic participation; (4) autonomy and independence; (5) education, training and information, (6) cooperation among cooperatives, and (7) concern for community, displays a great longevity prowess for sustainability if strictly adhered to. The main identifying features of cooperatives are seen in the first four principles that cooperatives are owned by, controlled by, and benefit their members, while principles 5-7 indicate that members need the education to contribute effectively to the daily operation of cooperatives; cooperatives should work with other cooperatives to break barriers from the government bottlenecks and lastly, cooperatives should be concerned on their communities sustainable development (Birchal& Simon, 2009; Yakar-Pritchad & Calyart, 2021).

Nature of Cooperatives in the Rural Communities

Cooperatives are organisations set up to meet their members' needs and as a tool for rural transformation. In principle, they are owned, used, operated and democratically controlled by their members, but in practice, many are being controlled by the government. This the government do through policy enactment; legislation; cooperative departments exist in other ministries (Ministry of Agriculture or Commerce and Trade (2) and programmes promotion for an acceleration of socio-economic development (Cndmir et al, 2021, Wanyama, 2013). Categorically, cooperatives in the rural communities of sub-Sahara, more especially in Nigeria clime is a state-sponsored model which greatly differs from the classical Rochdale model where individuals come together to change their destinies (Ojiagu, 2022; Igwe,2010). This condition is prevalent among cooperatives with a greater number of unlearned members who cannot either interpret the model principles or are not visited by cooperative field officers due to official bottlenecks.

Hence, members morale to participate in the management of cooperative downswings, the organisation loses its voluntary and bottom–up character and strength for members solidarity. Further, due to the agricultural model common in the rural areas, members most times do not realize sufficient returns from their operations occasioned by weather hazards, non-existence of share capital payment and no professional advice from the cooperative Department, all these culminate in undercapitalization. This leads to a severe dependence on external funding. What is more, most of the cooperatives are 'window-dressed' and hurriedly registered for one donor-support/loan or another, especially in the government ceremony of yearly farming season take-off, where improved seedlings are distributed. Thereafter, no more active operations of members on their own which are not in tandem with the principle of members economic participation (Authors Empowerment lecture/Training Experience, 2022).

Donor–Support

Donors are vital partners in all aspects of work and their contributions are recognised in every step of the way to improve businesses. The partnership with donors is key to success and an approach to international development programming. The experience of donors helps to keep organisations relevant and makes room for high-quality delivery and innovation (European Bank for Reconstruction and Development [EBRD], 2021). Donor support to cooperatives is most times funded through the government, thereby enhancing the resource influence of the state over the organisation creating a great ‘partnerism’ that has to a great extent affected effective membership participation in cooperatives (Wanyama, 2013). These donor contributions come in the form of money, technical support, loans, capacity building, and other things, and it is expected that the government will work with the aid organisation to provide ongoing education and training to the cooperative members so they can work together independently and be able to make informed decisions. Particularly for the underprivileged in rural regions who have low levels of education and no experience running economic groups (Moon & Lee, 2020). Members of cooperatives must be aware of the goals and operations of the organisation, as well as their obligations and ethical standards.

Overdependence on external support have made rural cooperatives ignore ideas, and highlights unequal relationships between the provider and recipients; opportunities are missed to develop local institution and strengthen local capacities. When cooperative members design, direct, implement and sustain a process themselves, sustainable change is inevitable (Wanjare, 2017). Oftentimes, donor-support (government paternalism) limits a group's liberty or autonomy (Stanford Encyclopedia of Philosophy). Adevtently, the interests of the cooperative were missing from the purpose of donor-support.

Theoretical Framework

The argument of this work on sustainability is braced by three models; Sustainability Vision (Khalili, 2011); the Wheel of Change Model of Sustainability (Doppelt, 2010), and the Human Aspect Model (Ulusf & Hartipaog, 2016).

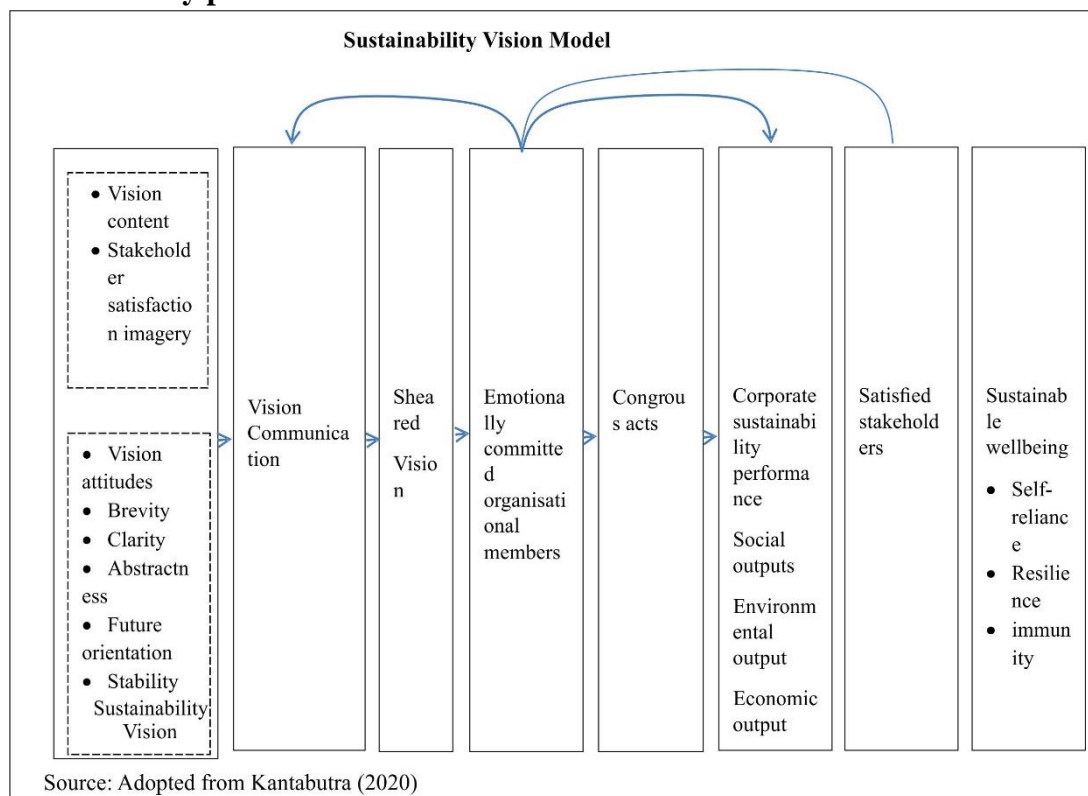
Sustainability Vision by Khalili, (2011) represents a mental picture of a desired future of an organisation. Communication according to (Khalili, 2011) is central to vision assimilation and the organisation members. This implies that sustainability vision should be shared through the organisation via vision communication especially where a positive vision exists to direct to real change. Vision is equated to a corporate pitch to convey enduring values.

When implemented, sustainability visions satisfy the aspirations, dreams, and desires of cooperative members. The substance of sustainability vision theory includes sustainability vision; vision communication; shared vision; emotionally committed

organisational members; congruent actions; corporate sustainability performance; satisfied stakeholders; and sustainable well-being.

Figure 1 explains from the left to right that the sustainability organisational visions comprise two components: the vision content and the vision attributes. The content means that the sustainability vision contain reference to increasing members of Cooperatives satisfactory symbolism, while the vision attributes are signaled by brevity, clarity, challenge, future orientation, stability, and ability to inspire. The expected outcome of the Cooperative sustainability performance can lead to improved sustainable wellbeing comprising Cooperative self-reliance, resilience, and immunity.

Figure: 1
Sustainability process



The Wheel of Change Model to Sustainability by Doppelt (2010) displays seven solutions to achieve sustainability. The first three solutions deal with changing mindsets, organising, as well as adoption, visions and principles. The fourth and fifth are about developing change and communicating with people with an emphasis on establishing means to design and test new ways of thinking and operating. The last two steps are on fostering learning and embedding sustainability in procedures and providing means to grow and last. These solutions are (i) teams (ii) vision, (iii) change (iv) new way of thinking (v) embedding (vi) motivation (vii) conflict managing. The

implication of this model shows that teamwork resonates sharing of some goals and responsibilities.

The Human Aspect Model demonstrates the need for human factors to interact during sustainability. Internal communication, bystander engagement, overcoming resistance to change, and participative engagement were identified by theorists as the four essential factors for achieving organisational sustainability. Communication within an organisation is used to influence both resistance to change and employee engagement in sustainability. Participation of cooperative members increases productivity and commitment.

Summarily, the three models have a factor in common and this is communication. Visions are shared to emphasise what matters to cooperatives in the rural areas and their members desires Vision typically emerges from organisation members and is developed when the cooperative as a whole engages in a collaborative process which is possible through communication.

All-Important Values of Cooperative Principles Four (4) and Five (5).

Corporate culture is created by the organization's governing principles (Guiso et al., 2015) as cited in Mwita (2019). Organisational culture stands out as one of the key factors in sustaining performance, and competitive advantage, and a solid reason for a business to become a thriving enterprise. Thus, organisational principles contribute to the formation of organisational culture, which bolsters an organization's identity. Seven (7) principles were designated by the International Cooperative Alliance (ICA) as the means by which cooperatives put their values into practice. The fourth and fifth principles of cooperative identity are among others. Autonomy and independence; Education, Training, and Information, which serve as guides for the performance of members and the cooperative.

Autonomy and Independence

Cooperatives are autonomous self-help organisations controlled by their members. Autonomy signifies that cooperatives have the freedom to act independently to govern themselves, control their affairs, and set their own rules of operation without undue influence from external pressures. The principle of autonomy and independence is mainly intended to speak to the core ideology of cooperatives, which exist to serve the interest and needs of their owners at all times.

Control of cooperatives rests with their members in accordance with the sound, open, transparent and accountable democratic process being practised. The principle continues to speak to the impact of ownership and democratic control that are processes being practised. The principle continues to speak to the impact of ownership and democratic control that are inherent in cooperatives. Cooperative members have the rational capacity as individuals to make informed and uncovered decisions. The takeaway of the principle could be that cooperatives are not supposed to surrender

their fundamental identity in order to get money or additional business partners or donor support. The principle educates that any form of partnership and collaborative efforts with vendors should not be detrimental to the autonomy and democratic governance of cooperatives. Democratic governance is such an underlying part of cooperation and is not to be surrendered for any reason even for business partnerships or capacity.

Though cooperatives in the area of study are more of state-controlled and state-financed which have seldomly affected members and cannot state the obvious about themselves. The cooperatives behold to government, ideology, or other potential influence and nearly do not work to serve the needs of owners. In order to maintain independence, cooperatives should retain owner control and raise funds through owner shares, owner loans and capital campaigns, which keep full control of owners (Ryle, 2021; Access Livelihoods Consulting India Limited [ACL], 2020)

Education, Training and Information

Education and training generally or human resource development is of cardinal importance for improving productivity and overall economic development. Countries which had recorded the best performance had not achieved results due to increased productive capital, but by developed appropriate knowledge and skills (Chukwu, 2012). The fifth cooperative principle emphasizes the need for cooperative education, training and information. This is fundamental to the cooperative movement, not only to ensure the success of the cooperative with an informed membership and professional management but also for future leaders of cooperative business. The essence of the cooperative education and training principle is to make membership effective and is a precondition for democratic control. (Menes et al, 2016).

Diverse organisations around the world have as one of their primary objectives the enhancement of operational performance; their primary strategy is the provision of education and training to facilitate the execution of daily activities. As member-owned businesses, cooperatives must provide ongoing education and training to their directors, members, and employees in order to develop the capacity required to meet their goals (Anania & Rwekaza, 2018). The cooperative education and training system functions as an empowering tool to develop the capacity of cooperatives to attain their desired ends, such as the improved provision of services to satisfy members, and further ensures a strong and self-reliant cooperative movement.

In the study area, among the major causes of failures and weakness of cooperatives especially in rural areas with reference to Nigeria had been and is still the absence of effective cooperative education. Manifest among the symptoms of lack of cooperative education and training is disloyalty of members, low attendance at meetings, members and officers ineptitude attitude; ignorance of members of the plans, proposals and work of their cooperative, poor member relations, poor decision making, over-dependence on external forces; bad management; low productivity resulting in little

or no surplus, poor public image, inability to change with the times and seasons and many more impediments (Business Council of Cooperatives [BCC], 2015; Chukwu, 2012).

Human resources development constitutes a major component of ICA's development programme, hence, reasons for cooperative education and training for members and other stakeholders enthrone, the self-preservation of the cooperatives. The continued development will no doubt, earn the cooperatives their place in society by providing goods and services to member patrons that are equal / better from any other source. Again, the realization and efficacy of self-direction are made more inherent as the system is a people's organisation. Cooperative members are placed in the position of having to direct and control the affairs of the institution and not 'wait-and-see' donor support and ideas but be proactive in setting their policies and making decisions. Cooperative members are to determine the courses of action, thus, education becomes a prerequisite to discharge their responsibility effectively and efficiently. In addition, cooperatives are expected to keep rendering good services to continue in existence and long outlive their founders, it has to educationally engage in self-reproduction by attracting the youths who will graduate into knowledgeable adult cooperators. Further, the officialization and non-officialization of cooperatives need to be eroded as much government involvement (Paternalism) in cooperatives challenged the democratic decision-making powers of member-owners (Anania & Rwekaza, 2018, Kinyuira, 2017; Chukwu, 2012).

Empirical Review

The Blueprint of the International Cooperative Alliance (ICA) seeks to position cooperatives as economic, social, and environmental sustainability builders by 2020 and recognises sustainability as one of the five pillars hence, extant work was reviewed in consonance with the title of work under discussion indicating the reasonability in the sustainability of cooperatives for long term value.

Agbayami-Gballero (2021) conducted a study on the impact of motivation on the sustainability of multipurpose cooperatives in Bukidon, Philippines, intending to examine the impact of motivation on the sustainability of cooperatives. There was mixed-method research conducted. According to the findings, motivation has a significant effect on the longevity of multipurpose cooperatives. In the presence of motivation, the economic sustainability of cooperatives is feasible.

Kantabutra (2020) examined an organisational theory of sustainability vision with a key variable of vision as a starting point for a process of sustainability transformation. The purpose of the study is to develop a refined theory of sustainability by advancing its vision. The results of the hypotheses reveal that effective visions for the theory of sustainability are characterised by seven characteristics: brevity, clarity, future orientation, stability, challenge, abstractness, desirability, and stakeholder

satisfaction. According to the study, organisational members with a shared vision have more common goals, perspectives, and outcomes.

Summary

Sustainability is the propelling force that considerably contributes to the survival of organisations in their respective industries. This appears to be the objective of organisations in the current competitive environment, particularly cooperative businesses. The cooperatives are investigating ways to ensure the longevity of their organisations so that they can continue to meet members' requirements and help them increase their income. The cooperative sector is a potent instrument for improving members' living conditions and sustaining economic growth; however, the "donor support" industry is currently challenged by a highly dynamic and competitive environment. The powerful notion that a group of individuals can accomplish objectives that none of them could achieve individually is questioned.

Nonetheless, cooperatives in the region can;

- Formulate programmes with the Directorate of Cooperatives in order to have excellent education and training programmes that reflect the needs of all cooperative actors/stakeholders.
- Instead of focusing solely on staff and current leaders, cooperative education and training should place a significant emphasis on aspiring leaders among the membership. This will ensure that the community as a whole maintains and expands its cooperative skills and knowledge.

Conclusion

Cooperatives can play a key role in strengthening the rural semi-urban and urban economic systems. The cooperative teachers members are economically independent. It promotes the feelings of promotion provide and remains a voluntary organisation with membership opportunities for all.

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IMPACT OF RISK ON THE FINANCIAL PERFORMANCE OF LISTED INSURANCE FIRMS IN NIGERIA

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Abstract

This study examined risk and financial performance of listed insurance firms in Nigeria for the period of ten years from 2011-2020. The population of the study consists of 22 insurance firms listed on the floor of Nigerian Stock Exchange as at 31st December. Secondary data was extracted from the audited financial reports of the sampled insurance firms. The data was analyzed using the multiple regression mode. The study findings revealed that solvency risk is positively and significantly influencing the financial performance of listed insurance firms in Nigeria. Conversely, liquidity risk revealed a statistical negative and insignificantly impact on financial performance. The study concluded that risk has a strong association with the financial performance of the firms for the period. The study recommends that the National Insurance Commission (NICOM) should have recapitalization base policy for Nigerian insurance industries as this will enable the firms to underwrite bigger risk in the sector and help forestall flight.

Keywords: Financial performance, solvency risk, liquidity risk, insurance firms.

Introduction

The financial performance of insurance companies in Nigeria is very vital. It is the major determinant of survival and sustainability in the business environment, (Ironkwe & Ossat, 2019). Ironkwe et al (2019) further asserted that globalization and intense competition brought an increased risks where risk asset is becoming an integral part for the success of almost every organization, especially for the insurance sector because of their high-risk businesses, as the risks are associated with every client in the business and their own risk. More so, Gwamna, Miko and Abdullahi (2022) posited that financial performance of financial institutions is geared susceptible to high level of risk which if not check will affect performance of the firm.

Financial performance is basically categorized as financial and non-financial performance. Financial performance which is the focus of this study, is the result of performing the financial activity. It is the procedure of assessing the outcome of a firm's strategies and actions in monetary expressions. Financial performance is a desired objective for all profit oriented companies such as insurance firm (Yahaya & Lamidi, 2015). A company's financial performance relies on the ability to predict,

track and handle risks and on the likelihood of insurance to compensate damages incurred by risks occurring.

Insurance companies are faced with various risks which are likely to have effects on their financial performance in one way or the other. An insurance company's profitability is considered to be reversed in connection with insolvency risk, and increased financial emergency can directly affect the demand for insurance, especially as policy holders are likely to be concerned about the ability of insurers to meet their future fixed claims under insurance contracts (Summer, 1996). Liquidity risk in an insurance company is considered as less threatening than in bank because of higher frequency of money exchange takes place in banking industry compared to insurance industry (Eckles, Hoyt & Miller, 2014). However, liquidity risk is equally important in insurance as in banking sector because of interconnection of financial system leading to cash crisis and secondly liquidity risk may prove very expensive to insurer due to meeting the cost of liquidity and also impacting the assets and liability mismatch. The goal of any corporation is to maximize a certain degree of efficiency and effectiveness which is regarded as performance. Profit maximization has always been the primary goal of every business firm, and it is the yardstick for measuring financial performance. Despite the importance of general risk factors to the operations of insurance companies in Nigeria, insurance companies seem not to give enough priority to it. This is evident in their inability to assume larger unexpected risks due to poor risk capacity. Hence, some of them had voluntarily raise capital either through private or public placement. For example, in 2018, twenty five (25) out of fifty eight (58) registered insurance companies in Nigeria voluntarily sought for recapitalization process due to their inability to play in high risk market especially in the energy and aviation sectors. Inadequate capacity had further been observed by the nation's regulatory body, National Insurance Commission (NAICOM).

In recent time, Nigerian insurance companies have been facing untold hardship which affected their financial performance (Ironkwe & Osaat, 2019). The financial reports of the insurance firms suggested that, some of the insurance companies had some challenges bothering inability to declare meaningful profit. Notably among these firms are: Africa Alliance Insurance Plc reported a net loss of ₦7.2 billion naira in 2019, Corner Stone Insurance Plc also recorded a net loss in two consecutive periods of 2017 and 2016 amounting to ₦2.5 billion and ₦1.8 billion naira respectively, and more recently, Guinea Insurance Plc in its 2019 and 2020 financial year declared a net loss of ₦227.073 million naira and ₦795.0422 million naira respective, and finally, Niger Insurance Plc also declared a net loss within the same period of 2019 and 2020 amounting to ₦1.18 billion naira and ₦1.69 billion naira respectively.

Moreover, the Nigeria Bureau of Statistics assessment of the insurance firms revealed a 15.3% contraction in the general financial performance of Nigeria insurance firms, (NBS, 2021). This forms a practical issue the study intends to investigate.

Furthermore, to the best of the researcher's knowledge, most of the studies conducted to measure risk and financial performance of insurance companies were carried out in developed economies, such studies include the works of Wu and Li (2021) in China, Ben Dhiab (2021) in Saudi, Tsvetkova, Bugaev, Belousova and Zhukova (2021) in Russia, Elsayed (2020) in Egypt and Yahiaoui and Mahdi (2020) in Algeria. The socio-cultural difference between developed and developing countries limit the applicability of findings of these studies to developing countries as recommended by Li and Liu (2014) that differences in economies is a significant gap in literature. Therefore, this constitutes an environmental gap this study will address. To find solution to the research problems, this study intends to answer the questions, does risk influence the financial performance of listed insurance firms in Nigeria? It is premised on the aforementioned problem that this study seeks to examine the impact of risk through solvency and liquidity risk in the Nigeria insurance firms' financial performance. The specific objectives are as follows:

- i. To determine the impact of solvency risk on the financial performance of listed insurance firms in Nigeria.
- ii. To evaluate the impact of liquidity risk on the financial performance of listed insurance firms in Nigeria.

Review of Related Literature

This section presents the definitions and review of extant related studies of other authors in the related topic.

Conceptual Issues

Concept of Financial Performance: Financial performance of a firm is consider as the life of any business. According to Gwamna, et al. (2022) financial performance is a process of measuring the results of a company's overall assets, liabilities, equity, expenses, revenue and overall profitability in monetary terms, which are capable of generating revenues for the business, to ascertain its overall financial health over a given period of time and to be used in comparing similar firms across in the same industry or other sectors in aggregation. Similarly, Bekhet, Alhyari and Yusoff (2020) defined financial performance as a process of measuring the results of a firm's policies and operations in monetary terms.

Concept of Risk: Salaudeen, Salam and Mudashiru (2021) sees risk from insurance point of view to includes unpredictability, adverse deviation, uncertainty and possibility of unfortunate occurrence which are all linked to economic losses. Furthermore, Rafique, Quddoos, Akhtar and Karm (2020) defined risk as the uncertainty of the future financial outcomes which can influence the profitability and targets of the institutions. Similarly, Fali, Nyor and Mustapha (2020), sees risk as the probabilities of partaking an unexpected or adverse outcome. Thus, any act or action that leads to loss of any type can be labeled as risk.

Concept of Solvency Risk: Elsayed (2020) defined solvency margin as the amount of capital that is measured by net assets over net written premiums. Solvency margin must be sufficiently large to cover all the risks to which the concern is liable, within certain limits. Solvency refers to capability of firms meeting their long-term obligations and sustains continued growth and expansion (Mukino, 2018). Solvency measures the amount of borrowed capital used by the business relative to the amount of owner's equity capital invested in the business, (Ironkwe & Ossat, 2019).

Concept of Liquidity Risk: Alalade, Ogbekor and Akwe (2020) submitted that liquidity is a financial term which depicts the amount of capital that is available for investment. According to Elsayed (2020) liquidity refers to an insurer's ability to fulfill its short-term obligations. The ratio of current assets to current liabilities is commonly measured. Gwamna et al (2022) defined liquidity risk as the possibility of a firm to not be able to convert its assets into cash to meet its short-term financial obligations without giving up (loss) capital and income in the process.

Empirical Review

Wu and Li (2021) examined the solvency risk management in property-liability insurance companies in China. 35 Chinese-funded property-liability insurance companies and 18 foreign-funded property-liability insurance companies in China's insurance market from 2009 to 2015 were tested as the sample size of the study. The results found solvency is positively significant in small Chinese-funded insurance companies as well as foreign-funded insurance companies, while it is insignificant in large Chinese-funded insurance companies. The study recommended that small Chinese-funded insurance companies should actively develop non-auto insurance and improve the risk diversification effect of the diversified business structure. On the contrary, foreign-funded insurance companies should give play to their differentiated advantages and continue to concentrate on the operation of non-auto insurance in China's insurance market.

Ben Dhiab (2021) examined the determinants of profitability in the Saudi insurance sector. The empirical analysis is based on data relative to a sample of 20 Saudi insurance companies between 2009 and 2017. Generalized Least Squares, Ordinary Least Squares with panel-corrected standard errors, Difference GMM and finally System GMM was employed to analyze the data. The empirical findings suggested that the growth rate of written premium, the tangibility ratio and the fixed-assets ratio are the main factors affecting positively the profitability of Saudi insurance companies. Moreover, company size and liquidity are positively but insignificantly associated with profitability. On the contrary, the loss ratio, liabilities ratio, insurance leverage ratio, and to a less extent, the company age have negative effects on the profitability of Saudi insurance companies.

Methodology and Model Specification

The study adopted correlational and expo facto research design. This design is chosen and considered appropriate because of its ability to describe the statistical associations between two or more variables and allows for making predictions by testing of expected relationship between variables and the data used for the study are not meant solely for the study. The population of the study consists of the twenty two (22) insurance firms listed in Nigeria Stock Exchange as at 31st December, 2020. However, the study used certain filters to arrive at the sample size of the study. Thus, only insurance firms with a complete data were selected as a sample size of the study to enable the researcher access to a balance panel data. Therefore, the sample size of the study is sixteen (16) insurance firms. The study used secondary data which was extracted from the audited financial reports of the sample insurance firms for the periods of ten years (2011-2020). The data was analyzed using the multiple regression technique. This technique is considered appropriate in view of the fact that it helps in establishing relationship between variables and also the effect cause and relationship between the variables.

The model of the study encapsulates the contribution of solvency risk (net income / total liabilities), liquidity risk (ratio of current assets to current liabilities) and return on equity (profit after tax / total equity) of listed insurance firms in Nigeria. It is mathematically represented thus:

$$ROE_{it} = \beta_0 + \beta_1 SR_{it} + \beta_2 LR_{it} + \varepsilon_{it}$$

Where:

ROE = Return on Equity

SR = Solvency Risk

LR = Liquidity Risk

β_0 = Constant term,

$\beta_1 - \beta_2$ = Coefficients of independent variables

ε = Error Term

i = Firms (DMBs)

t = Period

Results and Discussion

This section analyzes and presents the data of the study. It begins with descriptive statistics analysis, correlation matrix, diagnostic test of the study and presentation and discussion of the regression result.

Descriptive Statistics

The summary of the descriptive statistics of the variables are presented in table 1 where the minimum, maximum, mean, and standard deviation described.

Table 1: Descriptive Statistics

Variables	Obs.	Min.	Max.	Mean	Std. Dev.
ROE	160	-13.1857	1.3499	-0.0818	1.2384
SR	160	-1.1481	0.6995	0.0477	0.1758
LR	160	1.0049	5.3270	4.6070	7.5790

Source: STATA Output 2022

The table 1 above revealed that the return on equity of listed insurance firms in Nigeria has a mean value of -0.0818 with standard deviation value of 1.2384 and minimum and maximum values stood at -13.1857 and 1.3498 respectively. This implies that the average alteration of listed insurance firms in Nigeria is -0.0818 and the standard deviation from both sides of the mean is 1.2384. The minimum value of return on equity is -13.1857 which indicate that the least return on equity by the management of listed insurance firms in Nigeria will not cause significant distortion in the financial statement. However, the maximum return on equity value of 1.3498 entails a condition where the financial performance is covered by the distortion in the financial statement of listed insurance firms in Nigeria.

The average of solvency risk of listed insurance firms in Nigeria is 0.0477 with minimum value of -1.1481 and maximum value of 0.6995 respectively. Also, solvency risk revealed a standard deviation value of 0.17582 which implies that there is dispersion of data from the mean. Hence the data is normal.

However, liquidity risk has an average value of 4.6070 with minimum and maximum value of 1.0049 and 60.3270 respectively. This also implies that the data is not normally distributed as indicated by the wide dispersion from the mean. The table also revealed a standard deviation of 7.5790 for liquidity risk.

Correlation Matrix

The correlation matrix explains the degree of relationship between the dependent and independent variables of the study as well as the independent variables among themselves. The summary of the associations among the variables of the study is presented in table 2.

Table 2 Correlation Matrix

VARS	ROE	SR	LR
ROE	1.0000		
SR	0.2007*	1.0000	
	0.0110		
LR	-0.026	0.1157	1.0000
	0.9741	0.1452	

Source: STATA Output 2022

The result in Table 2 above shows a positive association exist between solvency risk (SR) and return on equity (ROE) of listed insurance firms in Nigeria evident by the correlation coefficient of 0.2007 and a p-value of 0.0110 which implies a weak positive correlation between SR and ROE. More so, liquidity risk (LR) is negatively associated with ROE. The result shows a coefficient of -0.026 with an insignificant p-value of 0.9741 implying a weak association between ROE and LR of listed insurance firms in Nigeria.

Regression Result

Table 3 below presents the summary of the pool ordinary least square regression results analysis. It shows the various values necessary for the discussion of regression results. Financial performance is the dependent variable proxy by ROE while risk is the independent variable proxy by solvency risk (SR) and liquidity risk (LR).

Table 3: Regression Results

Variables	Coefficient	T-Value	P-Value
Constant	-0.8353	-2.50	0.014
SR	0.7200	1.21	0.030
LR	-0.0027	-0.21	0.830
R²			0.5616
F-Stats			3.87
F-Prob.			0.0025

Source: STATA Output, 2022

Table 3 shows that the functional relationship between the dependent and independent variables is: **ROE = - 0.8354 + 0.7200SR - 0.0027LR**

The result shows that the R² which is the combined coefficient of determination indicates the extent to which the independent variables jointly explain the total variation in the dependent variable. Thus, it signifies that 56.16% (0.5616) of the total variation in return on equity of listed insurance firms Nigeria is caused by solvency risk and liquidity risk while the remaining 43.84% is explain by other factors not captured in this model. This indicates that the explanatory variables are well selected and combined because the R² of 0.5616 satisfies the minimum rule of thumb. The F-statistics of 3.87 signifies that the model of the study is fitted.

The analysis revealed that solvency risk is positively and significantly influencing the financial performance of listed insurance firms in Nigeria as indicated by a coefficient value of 0.7200 and p-value of 0.030. This implies that for every 1 increase in solvency risk, it will lead to an increase in financial performance by 72% (0.7200). The result agreed with prior studies of Wu and Li (2021), Elsayed (2020) and Yahiaoui and Mahdi (2020).

However, liquidity risk revealed a statistical negative and insignificantly impact on financial performance of listed insurance firms in Nigeria with coefficient value of -0.0027 and a p-value of 0.830 respectively. This implies that for every increase in liquidity risk, the financial performance of the listed insurance firms will decrease. Thus, liquidity risk is negatively and statistically insignificant with financial performance of listed insurance firms in Nigeria. The study finding is only in tandem with studies of Tsvekova, Bugaev, Belousova and Zhukova (2021), Al Omari (2020), Ukpong and Folarin (2020) and Bekhet, Alhyari and Yusuf (2020).

Policy Implication of the Findings

The findings of this study have policy implications particularly for the management and stakeholders of the listed insurance firms in Nigeria. The findings of the study have shed more light on the explanatory variables that have important effect in explaining the explained variable (financial performance) of listed insurance firms in Nigeria. Solvency risk was found to be doing enough in curbing insolvency of the listed insurance firms in Nigeria. The implication of this finding is that having adequate risk management mechanisms will lessen solvency risk.

5. Conclusion and Recommendations

This study examines two dimension of risk of listed insurance firms in Nigeria. Therefore, the following conclusions were drawn which were built from the findings of the study.

- i. The study concludes that solvency risk is statistically significantly influencing the financial performance of insurance as observed by the significant positive relationship between solvency risk and financial performance of listed insurance firms in Nigeria.
- ii. On liquidity risk, the study concluded that liquidity risk is positively but insignificantly influencing the financial performance of listed insurance firms in Nigeria.

Recommendations

Arising from the above and based on the outcome of the study, the study advances some recommendations for policy, practice and academic research.

- i. The National Insurance Commission (NAICOM) should conclude on the ongoing recapitalization exercise in the Nigerian insurance industry as this would enable insurers to underwrite bigger risks in the sector and help forestall capital flight. Insurers should embrace regular recapitalization exercise and take initiatives to increase its capital size without waiting to be prompted by regulators because recapitalized firms are more likely to be attractive to investors, employees, customers and other relevant stakeholders than firms with thin capital structure. Recapitalization plan should be included in insurance companies' strategic plans.

- ii. Insurance companies should strive to attract more customers and boost their income through provision of enhanced estimation techniques on insurance policy premium price to maximize their net premium earning and net asset. Insurance firms should consider investing their idle cash on various sectors by diversifying their investment portfolio.

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