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**THE PROBLEMS AND PROSPECTS OF MARKETING OF
AGRICULTURAL PRODUCTS (RICE, YAMS AND CASSAVA) IN
ENUGU STATE.**

**(A COMPARATIVE ANALYSIS OF UDI AND EZEAGU LOCAL
GOVERNMENT AREAS)**

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**DEPARTMENT OF MARKETING
FACULTY OF BUSINESS ADMINISTRATION
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**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF MASTER OF BUSINESS ADMINISTRATION**

**DEPARTMENT OF MARKETING
FACULTY OF BUSINESS ADMINISTRATION
UNIVERSITY OF NIGERIA, ENUGU CAMPUS**

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DECEMBER, 2002

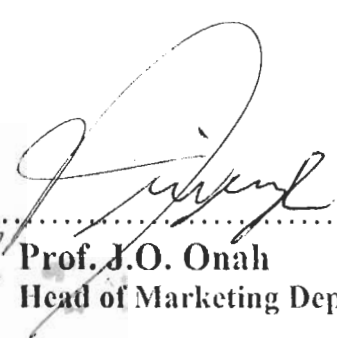
APPROVAL PAGE

This is to certify that **OCHI GODWIN EZIEKE** with registration number **PG/MBA/99/30784** carried out the research work on the problems of marketing of agricultural products in both UDI and EZEAGU Local Government Areas of Enugu State and this research project has been approved by.



.....
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(Project Supervisor)
Dean, Faculty of Business Administration
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14/10/2005



.....
Prof. J.O. Onah
Head of Marketing Dept

DEDICATION

This project is dedicated to the Almighty God and to the following members of my family viz:

1. My late parents: Ozor Ochi –Na-nwata
 - a. Nonu-igbo Nwanyankwo Ochi (nee Okolo-nwa ilo)
2. Members of my immediate family
 - i. Mrs. Irene Nwanyankwo Ochi (Nee Ejiofor((Wife)
 - ii. Miss Ndidiamaka Ijeoma Ochi (daughter)
 - iii. Miss Onyinyechukwu Chinyere Ochi (daughter)
 - iv. Miss Abumchukwu Chioma Ochi (daughter)
 - v. Master Chukwuemeka Ezechukwu Ochi (son)
 - vi. Master Chukwudi-ebube Ochi (son)
 - vii. Miss Tochukwu Ochi (daughter)

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I humbly write to acknowledge in print and thank the Almighty God for keeping me alive and safe-guarding me from the start of my academic pursuits to my present studies (MBA DEGREE) to witness this research project.

I Sincerely remember that it is not all those I started this race with are still here battling to be free. To this, I sincerely say glory be to the giver and keeper of life.

Furthermore, my special heart-felt thanks go to my project supervisor, Dean of Faculty of Business Administration, UNEC, Professor Ikechukwu E. Nwosu (Ph.D), a man of dedication that fears no dark nights.

In this regard, I do hereby appreciate your great concern for me, the time you sacrificed to read the work, and the immense helps you have given to me as my Dean and project supervisor.

I wish to thank my dear wife Mrs. Irene Nwanyankwo Ochi and my children for their encouragements, and unflinching support, my-in-laws Mr & Mrs Nnebedim Ejiofor whose helps and love contributed in no small measure to the completion of my academic pursuits till this stage, my dear sister Evangeline Chiegeonu Ochi and her daughter Chinwe.

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ABSTRACT

This research project is aimed at finding the problems that are militating against the marketing of the agricultural products in both UDI and EZEAGE Local Government Area of Enugu State. The researcher wishes further to find out how these problems can be solved taking cognisance of effective marketing of these products (yam, rice and cassava).

At the introductory part of the study the researcher studied the way agriculture was previously done in contrast to what is obtained today. It also dealt with the statement of the problems; purpose of the study; state of hypothesis, and limitations of the study.

Furthermore, chapter two dealt with literature review, which the researcher reviewed/used in the study of this work. While chapter three dealt with research methodology. The method of research were taken from two sources that is primary and secondary data. And these include personal observations; interviews and questionnaires. Also, there was the determination of the sample design procedure and analysis.

The questionnaires were analysed and interpreted which helped in writing of this project, and the hypotheses tested.

Summary of the findings, recommendation as to how these problems will be solved was also made herein and the conclusions drawn. The summary of the findings include:

- i. Financial constraints
- ii. The use of crude implements
- iii. Lack of market information
- iv. High cost of labour
- v. Lack of modern processing facilities.
- vi. Lack of agricultural loan
- vii. Pests disturbances and
- viii. High interest rates on loans given to farmers

The recommendation made are as followings:

- (a) enough loans should be given to the farmers;
- (b) the use of agricultural co-operatives;
- (c) the use of insecticides;
- (d) the use of improved varieties of crops;
- (e) the use of modern processing facilities;
- (f) low interest rates on loan taken etc.

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CHAPTER ONE

1.1: BACKGROUND OF THE STUDY

In the Nigerian economy, agriculture is very important. At least 70% of Nigerians are into agriculture in different scales (Small, medium and large scale farmers).

In Nigeria, agriculture serves either as a source of food, raw materials for our industries and/or both, and exports.

According to history, agriculture started with the early man that existed on this earth-long-ago. The early man was known to be a wanderer in that he moved from place in search of food mainly fruits, water and hunting for games. During this time food is said to be the most desired need of man in that man will never survive without food.

During this pre-historic age, man lived a very primitive life, and he lived more or less like animals depending entirely on nature for a livelihood.

After this stage, man started living a settled life as he learnt to till the land and so farm. At this stage, early man accidentally discovered that the fruits he picked gathered ate and threw away contained seeds, which would grow and produce more food. This

discovery made the early men to start growing food. (i.e. agricultural production). He, however, lived from hand to mouth, depending entirely on food from his farm, which was just enough for him and his family and left no surplus for trading or saving. This means there was production without any form of exchange and thus, no marketing, even in its rudimentary form.

At the barter stage, the early man had developed crude implements such as hoes and cutlasses for farming and hunting. Other skills include pottery, basket-making, wine-tapping etc. This he could offer in exchange for things he could not make (i.e. products) exchange was in the form of goods for goods hence barter. This was the beginning of specialization and trade. The use of crude implements in farming wasted a lot of energy and time, and agriculture was for subsistence.

Since the introduction of advance technology in farming, agriculture has moved from subsistence farming to a more commercial venture. The farmers therefore, sold their products to their customers/consumers. Then the marketing of agricultural products became necessary. The introduction of money as a medium

of exchange made this possible and marked a real advance in the growth of trade (marketing) and exchange.

Here, it is important to define these two terms “agriculture” and “marketing” because this research shall rest on these two terms.

Agriculture: According to Chamber dictionary “Agriculture is defined as the art of practice of cultivating the land, farming”.

This definition is limited in scope in that agriculture does not involve only the cultivation of land and then farming.

Another definition has it that “agriculture is the preparation of plant and animals for man’s use and feeding. Also, it is the science of cultivation of land for both human and animal consumption. Agricultural activities range from husbandry, to fishing”.

Marketing Definition

Marketing refers to as social and managerial process by which individuals and groups obtain what they want and need through creating and exchanging products and values with others (Kotler 1988 p. 3).

Also, marketing is defined as the business philosophy that identifies current unfulfilled needs and wants, defines and measures their magnitude, determines what target markets the organization can

best serve, and decides on appropriate products, service and programmers to serve these market. Thus, marketing serves as the best link between a society's needs and its pattern of industrial response.

Therefore, marketing is responsible for the satisfaction of human needs (food, clothing, and shelter) and wants (education, esteem, prestige etc).

The purpose of marketing of agricultural products is to effect the transfer of agricultural products from the producer to the ultimate consumer and industrial users in order to satisfy adequately.

It also establishes a linkages directly or through intermediaries, between producers and consumers or users of agricultural products. The major earner of foreign exchange for Nigeria from the pre-colonial days to post independence era is agriculture. Before the advent of the oil boom, Nigeria has been exporting agricultural products like rubber, groundnut, cocoa, palm produce, hides and skins, cotton and timber abroad for foreign earnings or exchanges.

Furthermore, the American marketing association (1960) defines marketing as the performance of business activity that directs the flow of goods and services from the producer to the consumer.

Although, these definition is not accepted today because it gives the impression that marketing starts after the production of goods and services.

Yes, since the advent of the oil boom in the early seventies, agriculture has so neglected that this country has become incapable of feeding its citizenry with basic foods. Because of this, each successive government has been worried about the acute shortage of basic foods, in Nigeria. It therefore, found it very necessary to shift emphasis from the dependency on oil back to agriculture, which is the broad base of an economy.

So, the production of basic food items to feed the over growing population of Nigeria has been the major concern of every government. This showed that governments are aware of the importance of agriculture and it (agriculture) cannot be neglected.

Most successive governments have never failed to show the importance of agriculture but the problem lies with the inability of these governments to device means or plans to solve the problems facing agriculture. There cannot be meaningful economic development and industrial growth without the transformations of the agricultural products.

The past and present governments have devised plans for transforming the economy on improving the agricultural sector. For instance, "THE OPERATION FEED THE NATION" (OFN) 1976 was introduced by Obasanjo, administration during the military regime, while in 1979 president Shagari introduced the "GREEN REVOLUTION" former PRESIDENT Babangida, on his part introduced AGRICULTURAL CREDIT GUARRANTEE SCHEME (ACGS) and DIRECTORATE OF FOOD, ROAD AND RURAL INFRASTRUCTURE (DFFRI) which provides basic amenities like road, electricity etc. to the people.

During the time of General Abacha, he stressed the importance of agriculture in the economy by allotting N2,798 Billion from the total budget to agriculture and shifting our interest from oil back to agriculture.

Marketing is very important in an economy because it is the basic process to production (agriculture) in the world economy. Marketing is too the lifeblood of business (economy) this is because no economy can survive without marketing.

For this reason, the importance of agriculture in the economy necessitated the establishment of then Commodity Boards with the

objectives of marketing specified industrial crops and staple foods crops. Other agencies that facilitate agricultural production are Enugu Agricultural Development Project (ENADP) and Enugu State Marketing Company.

Udi and Ezeagu Local Government Areas, which are study areas, are located in the North West of Enugu State. The two local government areas were formerly called Udi division. Ezeagu Local Government Area was later created and carved out from Udi division while the remaining part of Udi Division becomes Udi Local Government Area respectively.

Udi Local Government Area has its headquarters at Udi Town and it is made of autonomous communities (towns). The towns are Alfa, Amofia, Amozalla, Amokwu, Akpakweme, Nze, Egede, Umuoka, Umulumbe, Okpatu, Awhum, Ukana, Abor, Umuavulu, Ngwo, Ngwo Asa, Nsude, Abia, Udi, Umuaga, Nachi, Amokwe, Eke, Ebe.

Udi Local Government Area is surrounded by Aku-in-Igbo-etiti L.G.A., Ezeagu L.G.A., Oji River L.G.A., Enugu North L.G.A. and Awkwu L.G.A. of Enugu State. Udi L.G.A. is richly endowed in vast agricultural resources especially in the northern area of the local

government. The major occupation of the occupants is mainly farming. Their products include the major staple food in the country like yam, cassava, rice, corn, palm oil etc.

While Ezeagu local government area is also surrounded by Oji River L.G.A, Anambra State – Awka, Uzo-Uwani L.G.A. and it has its headquarters at Agu-Obiowa, and it is made up of autonomous communities. Ezeagu local government area is richly endowed in vast agricultural resources but notably in Ollo and Mgbagbu-Owa towns. They produce chiefly staple food like Rice, palm produce, cassava, maize, yam etc.

1.2: STATEMENT OF PROBLEMS

In Nigeria especially in the eastern part, agriculture is their main source of income and/or their occupation. In the past, the wealth of a man is how many barns (full) of yams he has, the number of goats, sheep, fowls etc. that is under his control, including the number of wives and children he has.

The optimum aim of a man then was to feed the large family he has and maintain the over all lord of the entire family. Because of this, then agriculture was motivated indirectly by producing more

food for the entire family. Although, agriculture was very primitive and crude implements were also used.

In the recent past, there have been various criticisms against the federal government proposal to import agricultural products such as beans from Bokinafaso. Then, the current food crisis facing the country is as a result of utter negligence of the agricultural sector and poor marketing strategies of our agricultural products like rice, yam, palm produce, garri etc. As a result of utter negligence of the agricultural sector by successive governments, many of our industries face acute shortage of raw materials, shortage of manpower (Unemployment) and foreign exchange earnings. These can be assumed as the sole cause of decline in agricultural marketing in the study areas (Udi and Ezeagu L.G.A.).

In the study areas, it is assumed that there are no accessible roads to the various farm settlements. This assumption is based on the fact that there are bad roads in almost all the towns of the local government areas. Moreso, Erosion and landslides menace are common in these areas, and these explain the nature of the soil and its effect on road construction.

As farm settlements are located far away from the towns/villages, farmers therefore, need accessible roads linking their farms to the towns and markets.

Where there are no storage facilities, the problems of marketing the agricultural products will be difficult. It therefore, assumed that lack of storage facilities hinder the marketing of agricultural products in the study areas (Udi and Ezeagu) this is because cold storage and preservation of agricultural products, and this cannot be used in the absence of electricity. Again, there is incessant power supply and lack of electricity supply in some parts of Udi and Ezeagu LG.A.

The removal of guidelines on interest rates by the federal governments, create an unpredictable marketing environment resulting on discriminating pricing systems of loanable funds, and cut-throat exchange rates, which most farmers and agriculturists cannot afford. This invariably affects the marketing of agricultural products.

Marketing communication system plays a vital role in creating awareness for the existence of agricultural products in any particular area. For this reason, potential buyers of agricultural products cannot make any business contract in the absence of publicity, advertising,

sales promotion and public relations. This means that the 'promotools' help the farmers to create awareness for their products and make profit.

Farmers need assistance from the three levels of governments in relation to supply of water, accessible roads, supply of agricultural inputs, granting of loans at a reduce rate, storage/preservation facilities etc. where these are lacking, there will be tendency that the cost of production will be high and marketing of the products become hard.

Farmers find it very to process their agricultural products, because they lack capital and required technology. It is assumed that poor processing of the products by farmers brings about the poor marketing of agricultural products.

1.3: OBJECTIVES OF THE STUDY

The objectives of this study are aimed at stating clearly the problems facing the marketing of agricultural products in the study areas. Therefore, the objectives of this study are as follows:

- . To examine how government policy affects the marketing of agricultural products.

- To assess the importance of accesses roads to agricultural production and marketing.
- To assess the role of marketing communication on the marketing of agricultural products.
- To find out the causes of high prices charged to the consumers and reasons for price instabilities.
- To evaluate to the processing level of agricultural products in the study areas.
- To determine the methods of storage and/or preservation of the agricultural products, and the effect it has in the marketing of agricultural products etc.
- To determine how the sourcing of loans and foreign exchange by farmers and agriculturists influence the marketing of agricultural products like (rice, yam, and cassava).

1.4: STATEMENT OF HYPOTHESES:

From the purpose of this study, the following hypotheses are formulated:

H₁: High interest rates on loans given to farmers induce poor production and marketing of agricultural products

Alternative Hypotheses (H₀): High interest rates on loans given to farmers do not induce poor production and marketing of agricultural products.

H₂: The prices of agricultural products are affected by poor storage/preservation and transportation facilities in the areas of study.

H₀: The prices of agricultural products are not affected by poor storage/preservation and transportation facilities in the areas of study.

H₃: There is a positive correlation between the availability of storage/preservation facilities and increase in food production.

H₀: There is no positive correlation between the availability of storage/preservation facilities and increase in food production.

1.5: RATIONALE FOR THE STUDY

The rationale for this study is based on the fact that Nigeria is currently facing an acute scarcity of agricultural products such as rice, yam, palm produce, cassava etc.

Scarcity and arbitrary increase in the prices of agricultural products was first noticed when interest rates deregulation was implemented in 1987. This study is therefore, directed in finding out the factors responsible for poor marketing of agricultural products in Nigeria including the role played by interest rates deregulation.

1.6: SCOPE OF THE STUDY

The research focuses on the marketing problems of agricultural products in Enugu State especially in the areas of study (Udi and Ezeagu L.G.As.) the agricultural product are rice, yams, palmoil, and cassava.

In this study more emphasis are laid on the problems of marketing of rice, yams and cassava in the said areas of study.

1.7: SIGNIFICANCE OF THE STUDY

The study is hoped to add to whatever is already known in terms of the problems of marketing of agricultural products in Udi and Ezeagu local government areas of Enugu State. The findings of

this study may be helpful to the farmers/agriculturists in improving their general performance in the marketing of agricultural products in the study areas, by making the products more readily available in good condition, all the season and at affordable price.

1.8: LIMITATION OF THE STUDY

This study was limited by finance because of too much money involved in the research work; the number of distributed questionnaires was not enough for this study.

In addition, the researcher could not visit all the research areas due to too much money required for traveling in order to collect facts from the farmers/consumers concerned.

Furthermore, the research work was also hindered by the short period of time. The time for writing the project was so limited that little time was devoted to other works like attending to lectures and reading for examination.

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CHAPTER TWO

LITERATURE REVIEW

The researcher shall review some works of other researchers in the related areas in the past and the outcome of their work. Therefore, journals, tests, business magazines and some research works are considered. Again an overview of agricultural marketing will be looked into before the review of the related literature in this study.

2.1: AN OVERVIEW OF AGRICULTURAL MARKETING

In chapter one, marketing has been stated as the lifeblood of any business in an economy and unless the importance of marketing is recognized no nation will develop. Also, marketing can be analysed as the performance of economic activities and satisfaction of customers' wants and needs through exchange process.

In the past, some agriculturists and farmers undertook their business without first making time to think about the 'marketing implications' of such businesses and this has made their businesses to 'be on 'trial and error' basis. In addition, marketing has been

described as a potential tool that can break a vicious cycle of poverty, as the fate of many nations is on marketing.

So, agricultural marketing involves the movement of the agricultural products from the producers/farmers to the final consumers or users and it includes the processing, assemblance of goods, grading, storage, transportation and financing of all these activities. To achieve marketing objectives, marketing orientation is required in handling of agricultural products so that customer's satisfaction would be met. But before customers will be satisfied the 4ps of marketing must be employed, that is products, place, price and promotion. Here is the brief definition of the 4ps:

Products: According to Philip Kotler (1983:246)

“A product is anything that can be offered to the market for attention, acquisition, use of consumption that might satisfy a want or need. And it includes physical objects, service, persons, place, organizations and ideas”. Among the 4ps, product is the most important because it determines the limit to the activities of an organization, product also determines the profitability survival and growth of the organization.

Place: This represents the measure undertaken to make the product physically available to the target market. It is important to make agricultural products readily available at a place the consumers need them at each given time. This undertaken involves storage, transportation, warehousing, physical handling, and other activities that makes the products get to the final consumers/user at the required time and place at a reasonable price.

Price: The price of a product or service is the amount of money a buyer has to pay in order to obtain what he/she wants. A person may pay N10,000 to buy a T.V. set while a company pays its manager N30,000 = annually for his service. The amount of money involved in each of these transactions is the price of the product or service. Therefore, it is the value of the product or service. Price is the major determinant of buyer's choice. Price produces revenue and it is the only element of the marketing mix that performs this function of revenue generation.

Promotion: Promotion is one of the various activities undertaken by a company in order to communicate to their target market about their products and persuade them to buy. Promotion includes sales promotion, personal selling, advertising, publicity and public

relations. These elements of the marketing –mix must be optimally joined by organizations in order to achieve their goals and customer satisfaction.

The need for increased participation in the agricultural marketing has been intensified or stressed by past and present leaders in the country. Some researchers have been carried out on the problems facing the production and marketing of agricultural products. Such as rice, yam, palm produce, cassava etc.

According to KOGLS R.I. et al (1983) stated that “adequate and efficient transportation is a cornerstone to our modern marketing system,” and that transport is a cost to who use it and change in the transportation contributes to the total marketing costs of food products. This means that there is a need for adequate and efficient transportation system in marketing agricultural products and their production.

Nwokoye N.G. (1984) sated and maintained that the very basic infrastructure needed to support modern marketing activities is poorly provided for in the developing economies. He further stated that due to insufficient storage facilities and inappropriate storage methods, spoilage and waste of products tend to be high.

The amount of marketing inputs needed in this storage function can only be imagined when it is remembered that some seasonal agricultural products have to be preserved and stored during harvest. And seasons of plenty for them to be fit and available for consumption during the lean seasons of the year and achieved by this function. Storage for grains are either too few or non-existence. He also said that modern communication networks are often myopic in scope to make any impact on business transaction.

According to CHUKWUANU M.A. on the discussion of the problems of agricultural products, she emphasized that one of the problems facing agriculture is that farmers find it difficult to adjust their production schedules to most changing conditions. This she said is because of long gestation periods needed in the agricultural production. Since the market is dynamic and the tastes/preference of consumers is not static, the demand of consumers of agricultural products do change. These may or not come within the period the farmers can take it into consideration while planning for their production. This creates the problems of not having outright sales of products, selling below the anticipated production price, not

achieving returns on investments, which may put the farmers out of business.

He went further to write that due to economic pressure on producers of seasonal crops, they may be forced to sell out most of their output at harvest time so that the price they receive is much lower than the average prevailing price through the year. This may cause an effective break on expansion of output. There is a lot of wastage of agricultural products as a result of non-availability of adequate storage facilities, efficient transport system and lack of effective communication. Storage facilities help to cover the off-season with excesses of the harvest. But when the storage facilities are inadequate, considerable quantities of agricultural products harvested are lost. The need for storage facilities is to prevent agricultural products from deterioration after harvest and to preserve them until needed by buyers.

Ojo M.O. (1981:45) in his study, said that the place of transportation in marketing is fairly straight forward too, the primary requirement of an efficient transportation system is not only that the cost to the user be lowest, but also that goods be moved quickly with as little delay as possible”.

AKIMFEMIWA A. in marketing his own contribution on "why modernization and commercialization of Nigeria Agriculture is poor" said that "the problem of lack of good roads and transportation facilities hinder commercial agriculture in the country." According to him lack of good roads make it difficult to move farm equipment, machines and outputs. He further stated that: "If what is produced can get to the consumers at the required time, the tendency will be for the producers to embark on mass production", and he then concluded that farmers will be able to use modern machines and then to into payable commercial farming as long as there is market demand.

Ojoko S. on his contribution wrote about the problem of marketing to Nigerian agriculture. He stated that poor marketing is a major problem of agricultural development in Nigeria, and that if no adequate solution or attention is given to this direction, it will continue to leave the country backward agriculturally. He attributed the problem to the following:-

- Price instability
- Lack of adequate transportation facilities;
- Lack of adequate storage facilities and
- Inadequate preservation facilities.



Production of agricultural products is usually subject to the caprices of the weather. As a result, the yield of agricultural production, in terms of volume and size, is generally unpredictable and this makes planning difficult. Most agricultural products such as yam, cassava, fruits, vegetables, and even cereals like rice, deteriorate after a while, and this situation naturally affects the quality and the volumes of these products as well as their prices at different times of the year, and this constitutes a serious challenge to agricultural marketing in Nigeria. It therefore, calls for efforts at finding ways and means of preserving these items to void the huge waste that accompanying agricultural products after harvest.

WARREN E. LEE (1980:108,109) stated that "Credit facilities increase efficiency". The use of credit makes it possible to substitute one resource for another.

For instance, machine might be substituted for labour as a means of reducing the cost improving timelessness and increasing the efficiency of farm business. Also, credit facilities are necessary to improve utilization of current resources and intensity of production through the purchase of additional agricultural inputs. He further stated that credit facilities help the framers to meet seasonal and

annual fluctuations in income and expenditures. Agricultural inputs must be purchased in one period and products are sold later in the year so that cash inflows and other outflows typically cannot occur at the same time.

ABEL AND RIJOKE in their research, said that the world probably, would continue to have excess production capacity by 1980, and any problem of food shortage would arise out of the distribution of productive capacity or of commodities among the countries producing for export and those countries that depend on imports. Again, he stated those archaic marketing facilities poorly conceived, pricing policies and inadequate preservation/storage facilities in developing economies contribute to food deficiencies because of antiquated farming methods.

According to Ifeanyichukwu O. (1989) in his paper "Reasons for the weakness in agricultural production in the developing nations" stated that there are some reasons for the decline of agricultural produce; fast production growth, technological revolution in tropical food production which has just begun, non-existence of agricultural extension services and the network for supplying modern inputs to farmers" etc.

He suggested that in the adoption of the Nigerian fifth development plan, that this complementarity and compartmentality must be reconciled to ensure functionless and higher productivity in the agricultural sector.

Ojo M.O. (1981) further stated that “marketing in Nigeria is also characterized by lack of equate marketing information system which creates a number of problems.

Firstly, contact between producers and the market is impossible or at best kept below optimum. As a result, there is a considerable time lag in-relative movements of consumers and producers prices.

Secondly, a truly national market is difficult to create rather the economy is subdivided into series of local markets. This makes orderly and timely flow of commodities from the food surplus to the food scarce areas difficult leading to an inter-market price variation”.

He also maintained that the problems of rural indebtedness is another great impediments to an efficient marketing system. Indebtedness occurs as a result of seasonally of income of farmers. The bulk of the farmer's income comes once or twice a year when they sell their produce. As the majority of these rural farmers are poor, they can only meet their regular demand or expenses by means

of credit. In the absence of a well organised and efficient credit service, farmers do borrow mainly from merchant lenders who not only charge exorbitant rates of interest on the borrowed, but also are often in a position to compel or force the farmers to sell their crops through them at a considerably low prices than the prevailing prices in the free market economy.

According to Martin Krisberg, in his article-“marketing of food in developing nations second phase of the war on hunger” observed that the problem of world hunger lies on the distribution of food. He listed some of the factors that are responsible for the growing pressure on food supplies and on the scale of marketing operation. The factor is: population, rural – urban migration and rising income levels. This study revealed that the problem of food in the developing nations is as a result of their marketing system in that: if the marketing system does not serve the interest and needs of the producers, there is a disincentive to higher productivity. If the system does not work sending food to the consumer when not needed and at prices they can not afford, higher production will have little effect on the war against hunger. He further recommended on how to modernize food marketing in developing nations such as:

- (1) Encouraging more food production for commercial marketing.
- (2) Increasing the processing and preserving of foods.
- (3) Reducing the loss in moving commodities from producer to consumer.
- (4) Increasing the nutritional value of food.
- (5) Supplementing commercial channels of distribution.

He observed too that the developing nations doubt their marketing system. The efficient distribution of food can increase food production indirectly by reducing waste and increasing marketable surplus. Insufficient production and inadequate marketing system accounts for food problem in developing countries. This is evident in massive food items importation by developing nations and the inability of the food items to get to certain segment of the market especially the rural dwellers.

ABBOT J.C. (1977:324) stated that better use of resources would occur if farmers would make extra efforts and additional cash outlay required. This, he said they are likely to do if they expect to benefit thereby. According to him the requisites for market demand to exercise its full incentive on agricultural products are:-

Adequate marketing facilities: the marketing system should ensure that growing demand with stabilized prices and differentiation for quality at the processing/consuming levels are actually reflected in cash receipts of the producer and are not lost enroute.

Satisfactory system of land tenure: He said that the effect of market incentives for improved and increased production will be greatly reduced if the system of land tenure results in a large share of the returns for any increased production accruing to landlords.

He said also that farmers will hesitate to incur the expenses and effort needed to improve their holdings unless they have reasonable security of tenure.

Reasonably stable prices for agricultural products at a remunerative level. Unless farmers have confidence that price will bear some minimum relationship to cost, farmers will hesitate before incurring additional work or expenses to increase their output or raise quality standards.

Abbot, further wrote on the problem of price that "so long as most of the price lists are left for farmers to bear, it is not reasonable to expect them to accept better production methods which require a large initial cash outlay. Some protection against unduly low prices

seem essential at a level sufficient to cover their out-of-pocket expenses". Other problems he identified that impade the developing of agriculture in most developing nations are:

- Inadequate transportation and storage facilities
- Inadequate handling and grading facilities
- Lack of timely information on current market conditions
- Need for integrated programmes in which case economic development will be planned that increase in product will meet market demand through the various transports, wholesaling and processing to retail distribution.

Furthermore, AKINFEMINA A. said that the importance of good marketing in the success of an enterprise could not be over emphasized poor marketing practices have been the order of the day in the developing countries of the world. Whatever that is produced in he rural areas should get to the urban markets early and in good condition. But due to bad roads, bad handling and no adequate measure over preserving of food items; a lot of food is wasted. The quantity that gets to the urban areas is relatively very costly and here again the low income earners suffer most in the common market".

He also said on the problems of marketing research for agricultural products that lack of attention and provisions by government policies make the atmosphere inconducive for the produce, the processors and marketers to make long term investment in agriculture.

Also, the high percentage of illiteracy coupled with language difference in the country make the use of questionnaire in marketing research approved limited and costly. In addition, inadequate town planning and lack of street maps make the use of questionnaire for information gathering difficult.

The government on its own part has paid little or no attention to agriculture. Government efforts are not enough to revitalize the poor situation of agriculture. Government budgetary allocation to agriculture still does not increase the high productivity level that is expected of such allocation. But many at times the location meant for it will be mismanaged.

The Nigerian colleges and universities of agriculture have not been helpful in that their products are too to change the ratio between the traditional peasant farmers and medium/large scale farmers. These colleges and universities have failed to sustain or maintain a

follow-up system that ensure that their products are able to apply in practical terms what they learnt. But those successful farmers now are those that have established medium or large-scale mechanized farms where they employ people with agricultural technical know-how.

In Nigeria today, agriculture has not been attractive in that the so-called literate, educated and the cream of the society are antithesis of farming. They believe that agriculture is for the illiterates, less educated and less privileged people instead of taking it as profitable business venture, which gives a high turnover when, managed well.

Also, the non-involvement of peasant farmers in the policy formulation stage and inconsistent technological methods adopted has also hindered the smooth of efficient and effective agricultural practice. No appropriate farming system was introduced and the farm settlement schemes and large farm plantations were conceived without reference to the peasant farmers with a view to achieving user participation.

*SCHERTZ L.P. in his lecture enumerated so many problems facing agriculture in most developing nations and he said that these problems are more pronounced in these developing countries. He

then, pointed out the importance of marketing in farm success and stressed the various forms of marketing deficiencies and setbacks on the commercialization of agriculture. He further said in his lecture that marketing no less than production must be planned ahead. Those who handle crops in the system will need to adopt their methods to new varieties. Government agencies on their part will have to take account of the different marketing partners in order to provide adequate supporting service. He said that a good number of developing countries now dependent on concessional food imports are predicting self sufficiency with the next few years. Yet he observed that little efforts are under way to develop a proper marketing system while the system needed to move massive quantities of food from the country side into the urban areas without which self sufficiency can never become a reality.

MELLOW J.N. in his own contribution estimated losses on storage to rodents, insects, pests and other sources vary from a few percent to as much as climate and method of storage, and handling as well as on the nature of the commodity itself. He suggested that substantial amount of products can be saved through improved storage. He further stated that (1) the relative high cost of marketing

from many bulky perishable commodities produced some distance from the market results in large part from his transportation costs substantially, and thereby provide increased price to producers and increased production". As a result there is high cost in transporting bulky goods and perishable produce.

Coming to the issue of storage, KHOLS & UKL said that, cost under those things necessary to provide the physical facilities include the followings: repairs, depreciations, insurance etc., these costs are against loss. Other costs may include: interest on the financial investment in the storing of the products, the cost of quality deterioration in storage, the loss which may result due to poor consumer acceptance of the "stored" as against the "fresh" products and the risk of those general price decline. Under the circumstances, the product might be sold at less than its storage value for reduction of storage cost. KHOLS AND UKL, suggested that adequate storage reduces the amount of deterioration of agricultural products.

The researchers' opinion on the issue of storage due to economic pressures on the part of the producers of seasonal crops, the farmers may be forced to sell out most their output at harvest time so that the price they receive is much less/lower than the average prevailing price through the year. This may cause an effective break on expansion of output. There is a lot wastage of agricultural products in Nigeria as a result of non-availability of adequate storage

facilities, efficient transport system and lack of effective communications system. Storage facilities help to lengthen the life of the product and to cover the off-seasons with excesses of harvest. But considerable quantities of agricultural products harvested are lost or wasted when the storage facilities are inadequate. The need for storage facilities therefore, is to prevent agricultural products from deterioration after harvests and to preserve them until when needed by buyers. In addition, poor transportation and communication system are both unreliable and unsafe for business transaction. Efficient marketing is a sine-qua-non (i.e. essential condition) for farm success and profitability. Farmers make good success in farming by not only being concerned with the production of the farm products but also by making extra effort for the efficient marketing of the farm products. The farmer should decide on how to sell his products, in what form and on what terms. All these are important if the farmer will reap the full fruit of his labours (efforts) and continue as well as increase the volume of the production of agricultural products.

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CHAPTER THREE

3.0: RESEARCH METHODOLOGY

Research methodology refers to the methods and means by which a research work is carried out. This chapter will go a long way to state the ways in which the data and information about the research were collected and the method of containing them.

3.1: SOURCES OF DATA

The data used in this research project were from two main sources viz:

The primary data

The secondary data

3.1.1: PRIMARY DATA

A primary data is “information which gathered specifically to solve a current problem”. This data is the original data that is developed or collected by the researcher for use in order to complete a particular project or study. The methods of collecting a primary data are:-

- Through the use of questionnaires

- Through the use of observations
- Through oral interviews

Then for the purpose of this study, questionnaire application and oral interview would be employed. The questionnaire and oral interview would be for the farmers that is, the producers and marketers of agricultural products.

3.1.2: SECONDARY DATA

The secondary data is already existing data mainly in published form. This data that had been gathered and stored somewhere they could be reached where they could be reached whenever the need arises. The secondary data are in published forms such as magazines, journals, textbooks, bulletins, periodicals and other printed materials.

3.2: SAMPLE DESIGN, PROCEDURE AND ANALYSIS

The areas of study, UDI and EZEAGU local government areas of Enugu State will be divided into four zones with centers at: UDI, AFFA, ABOR and UMULUMGBE towns for UDI LGA while OGHE, OWA, OLO and UMUNNA towns for EZEAGU LGA respectively.

The division zones is to facilities data distribution, collection, and analysis. The zones are:

TABLE 3.2A (i) THE ZONES FOR UDI LGA

ZONE A	ZONE B	ZONE C	ZONE D
UDI	AFFA	ABOR	OKPATU
AMOKWE	OGOR	NGWO	UMULUMGBE
UMUAGA	AMOKWU	EBE	UMUOKA
NSUDE	AMUZOLLA	UKANA	AMANKWO
ABIA	AMOFIA	UMUAKURU	AMAEKE
NACHI	NZE	AWHUM	
UMABI	AKPAKWUME	EKE	

For the distribution of the questionnaires, 320 questionnaires were administered to the respondents and each zone received a total of 80 questionnaires.

That is $\frac{320}{4}$

$$= 80$$

Out of the 320 questionnaires administered, 240 were returned, this means that 240 questionnaires returned were accepted.

TABLE 3.2B (i) :

Towns/centers	No. of questionnaires administered	No. returned	No. of questionnaires returned
UDI	80	72	90
Affa	80	62	77.5
Abor	80	55	68.75
Umulumgbe	80	51	63.75
Total	20	240	

With reference to the table above Udi returned 72 questionnaires accepted, Affa returned 62, Abor returned 55, and Umulumgbe returned 51 questionnaires accepted respectively which make up a total of 240 questionnaire. The ones not returned were on the basis of incorrect filling and mistakes.

TABLE 3.2A (ii):**THE ZONES FOR EZEAGU LGA**

ZONE A OGHE	ZONE B OWA	ZONE C OLO	ZONE D UMUNNA
Neke		Okpoho	Umumba Ndi -Uno
Iwolo	Owa-Imezi	Ukpata	Umumba Ndi-Agu
Akama	Mgbagbu-owa	Awha-Ndi-Agu	
Onyoho	Awha-Imezi		
Amashiodo			

Number of questionnaires distributed were 320 and each zone received a total of 80 questionnaires.

$$\text{This means } \frac{320}{4} = 80$$

Out of the 320 questionnaires administered, 240 were returned.

These returned one were correctly filled and accepted.

TABLE 3.2B (ii) :

Towns/centers	No. of questionnaires administered	No. returned	No. of questionnaires returned
Oghe	80	62	77.5
Owa	80	55	68.75
Ollo	80	72	90.00
Umunna	80	51	63.75
Total	320	240	

From the table above, Oghe did return 62 questionnaires which were accepted; Owa returned 55 and were accepted, Ollo returned 72 and accepted; Umunna returned 51 and they were accepted. These made up of a total of 240 questionnaires.

CHAPTER FOUR

4.0: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter four highlights the functions of production and its distribution system, transportation, processing, storage and pricing of agricultural products (Rice, Yam and Cassava). Also this chapter analysis and interprets the functions of the data collected throughout the distribution of questionnaires to those concerned. So 320 questionnaires were distributed or administered amongst.

The four zones which the Local Government Areas were divided into by the researcher in order to collect the primary data for this research work. Each Local Government Area is divided into four zones namely: UDI, AFFA, ABOR and UMULUMGBE are for UDI LGA while OGHIE, OWA, OLLO and UMUNNA are for EZEAGU LGA. Out of the total number of 320 questionnaires distributed in each Local Government Area of the researchers area, 240 questionnaires were returned and accepted in each.

Though, oral interview and personal observations were also used as source of primary data, this analysis will solely base on the

questionnaires administered because oral interview and observation lack the characteristics of quantifiable data.

This chapter is divided into two parts namely part A and B. Part A dealt with the production and marketing system, storage, transportation, processing and pricing of Yam, Rice and Cassava while part B dealt with the testing of the hypotheses.

4.1: PRODUCTION, STORAGE, PROCESSING, TRANSPORTATION AND PRICING

These functions stated above, the researcher deems it good to discuss them one by one and discuss too how the farmers are finding it difficult to cope with these functions in UDI and EZEAGU local government Areas.

4.1.1: PRODUCTION AND DISTRIBUTION CHANNELS

It was earlier stated that Agriculture is the life blood of any economy, and no nation can claim to be rich or wealthy unless it can actually produce enough food for its nation. This in mind, all efforts are geared towards encouraging and increasing the agricultural outputs.

In the research conducted farmers were asking in question 1, whether the produce is for subsistence or commercial purposes.

TABLE 4.1.1a i. Do you produce for commercial or subsistence purposes? Responses from farmers at Udi LGA

Responses	No. of Responses	% of Responses
Commercial	170	70.83%
Subsistence	70	29.17%
Total	240	100

The number of people that produce for commercial are 170 or 70.83% and their numbers are far greater than the small farmers that is, those that produce for subsistence i.e. 70 or 29.17%.

TABLE 4.1.1a (ii) Do you produce for commercial or subsistence? Responses from Respondents at EZEAGU LGA

Responses	No. of Responses	% of Responses
Commercial	140	58.33
Subsistence	100	41.67
Total	240	100

The above table revealed that those farmers who produce for commercial are 140 or 58.33% while those farmers that produce for subsistence are 100 or 41.67% respectively.

Furthermore, the farmers were asked in question No 2, what they can say about the general output of rice, yam and cassava in both Udi and Ezeagu LGAs under study.

TABLE 4.1.1a i. What are the General Output of Rice, Yam and Cassava in Udi LGA? Responses from farmers in Udi LGA

Responses	No. of Responses	% of Responses
Decreasing Output	118	49.17
Increasing output	84	35.00
I don't know	38	15.83
Total	240	100

Out of 240 respondents, 118 or 49.17% said that the general output of the produce is decreasing, 84 or 35% of them said they are increasing, while 38 or 15.83% of them said that they don't know.

TABLE 4.1.1a (ii) Responses on the general output of rice, yam and cassava in Ezeagu LGA

Responses	No. of Responses	% of Responses
Decreasing Output	112	46.7
Increasing output	86	35.8
I don't know	42	17.5
Total	240	100

From the above responses, it was observed that production of these products have been on the decrease. Out of 240 questionnaires returned and accepted, 46.7% or 112 of them were of the opinion that there is decrease of agricultural outputs, while 35.8% or 86 still maintained that there has been an increase, and 17.5% or 42 of them, were of the view that they don't know much about the production output.

TABLE 4.1.1b i. Responses on the output of Rice, Yam and Cassava in Udi LGA

Responses	No. of Responses	% of Responses
Decreasing Output	109	45.4%
Increasing output	87	36.3%
I don't know	44	18.3%
Total	240	100

From the above responses, it was observed that production of these products have been on the decrease. Out of 240 questionnaires returned and accepted, 109 or 45.4% of them were of the opinion that there is decrease of agricultural outputs, while 87 or 36.3% maintained that there has been an increase, and 44 or 18.3% of them, were of the view that they don't know much about the production output.

TABLE 4.1.1b ii. Responses on the output of Rice, Yam and Cassava in Ezeagu LGA

Responses	No. of Responses	% of Responses
Decreasing Output	110	45.48
Increasing output	86	35.8%
I don't know	44	18.4%
Total	240	100

From the above responses, it was observed that production of these products have been on the decrease. Out of 240 questionnaires returned and accepted, 110 or 45.8% of them were of the opinion that there is decrease of agricultural outputs, while 86 or 35.8% maintained that there has been an increase, and 44 or 18.4% of them, were of the view that they don't know much about the production output.

The researcher went further to know the cause of this decrease and in question no 4 while it was the decrease.

TABLE 4.1.1b i. Responses on why there is decreasing output in Udi LGA

Responses	No. of Responses	% of Responses
High cost of production	78	69.6%
Lack of improved soil fertility	5	4.5%
Lack of good feeder roads	15	13.4%
Lack of farm land	6	5.4%
I don't know	8	7.1%
Total	112	100.4%

It can be observed from their responses that majority of them were of the opinion that the decrease is as a result of high cost of production. During the oral interview, many of them complained of high cost of agricultural inputs more especially those that use paid labourers.

Again some of them complained that they cannot afford other inputs like fertiliser, improved seeds, tools, pesticides, etc and this thereby limits their production outputs.

TABLE 4.1.1b ii Responses on why there is decreasing output in Ezeagu LGA

Responses	No. of Responses	% of Responses
High cost of production	80	71.4%
Lack of improved soil fertility	4	3.6%
Lack of good feeder roads	17	15.2%
Lack of farm land	8	7.1%
I don't know	3	2.7%
Total	112	100%

Responses from the above table show that majority of the farmers where of the view that the decrease is as a result of high cost for production. They also complained of farm inputs of production. In addition they complained that they cannot afford to buy agricultural inputs such as tools, improved seeds, fertilizers, pesticides, etc.

In both Local Government Areas under study (UDI AND EZEAGU) their agricultural products must be made available to the users. In making these products available to the users, the farmers

have the options of taking their products to the markets and selling direct to the users or consumers. Although some may prefer selling to the wholesalers or agents who will then sell to the consumers or to the retailers who will in turn sell to the final consumers.

Summarily, these farmers have many outlets through which they can market their farm products and they include, local traders, wholesalers, or agents, retailers, co-operative society and/or marketing boards.

During the oral interview it was noticed that many farmers in UDI AND EZEAGU LGAs do not have any access at all to the marketing boards and co-operative society.

The researcher went further to know how these farmers market their products and ask in question no. 19 whether they take their produce direct to the market.

TABLE 4.1.1d i. Do you take your produce direct to the market?**Response from farmers at UDI LGA**

Responses	No. of Responses	% of Responses
Yes	165	68.75%
No	75	31.25%
Total	112	100%

Out of 240 questionnaires returned 165 or 68.75% agreed that they take their produce to the markets while 75 or 31.25% answered no to the question.

TABLE 4.1.1d ii. Do you take your produce direct to the market?**Response from farmers at EZEAGU LGA**

Responses	No. of Responses	% of Responses
Yes	160	67%
No	80	33.3%
Total	240	100%

From the above table the researcher observed that 160 or 67% agreed that they take their produce to the markets for sale while 80 or 33.3% do not take their produce to the market for sale.

In summary, three channels of distribution exist for these agricultural products in the studied areas. During the oral interview the following information was obtained from the farmers in the areas of study.

1. ZERO LEVEL OF DISTRIBUTION: This is direct channel of distribution that is, from the producer to the consumers or final users. Producer-consumers.
2. ONE ZERO LEVEL OF DISTRIBUTION: One zero level means from the producer to the retailers and then to the final consumers. Producer-retailers-consumers.
3. TWO ZERO LEVELS OF DISTRIBUTION: This means from the producer to the agents/wholesalers and then to the retailers and finally to the consumers. Producer-agents/wholesalers-retailers-consumers.

4.1.2: STORAGE

It was observed that when acquiring inventories it leads to a need for storage facilities such as warehouse and distribution centers. Usually factories or industries are located near suppliers of raw materials, suitable labour force, accessible roads, power supply and so on. And even retailers locate their shop close to their major markets.

When the agricultural products are harvested, the farmers do not take all of them to the market or consumers. This is because production is seasonal and consumption is continuous, and for this reason, storage facilities are required in order to ensure steady supply of the agricultural products to meet demands. And it has been observed too that there is considerable wastage of food and agricultural raw materials because of inadequate storage facilities.

Sufficient storage is one of the quickest and most effective ways of increasing the marketable output of the farmers, protecting the producers from insects and pests attack, reducing unseen contingencies like fluctuating prices and scarcity of the products, and maintaining the quality of the products.

Storage function is one of the marketing activities that involves holding and preserving of products from the time of their production/harvest until when they are needed by the final consumers. And these products are not needed at the same time and therefore, there is need to safeguard the unwanted surplus until when they are needed by the consumers/users.

With reference to the areas of study (UDI and EZEAGU LGAs), it will not be over statement to mention that there is either no

improved method of storage or that there is crude method in practice. And this leads to price variation with the season; very cheap during harvesting season and high prices during the planting period.

Furthermore, the respondents were asked in question number 5 whether they store their products at all.

TABLE 4.1.2a (i) Do you at all store your products?

Response from farmers at UDI LGA

Responses	No. of Responses	% of Responses
Yes	210	87.5%
No	30	12.5%
Total	240	100%

With reference to the above table 210 or 87.5% out of 240 questionnaires returned agreed that they do store their products, while 30 or 12.5% of them agreed that they do not store their products.

In the table below the farmers were asked by the researcher whether they at all store their products.

TABLE 4.1.2a (ii) Do you at all store your products?**Response from farmers at EZEAGU LGA**

Responses	No. of Responses	% of Responses
Yes	200	87.33%
No	40	16.67%
Total	240	100%

Out of 240 questionnaires returned, 200 or 87.33% of them said yes that they do store their products, while 40 or 16.67% of them said no to the question.

In question number 6 farmers were asked, how do they store their product.

TABLE 4.1.2b (i) How do you store your products?**Responses from the Respondents at UDI LGA**

Responses	No. of Responses	% of Responses
Scientifically	17	8.0%
Traditionally	180	84.9%
Both	15	7.1%
Total	212	100%

Out of 212 questionnaire returned, 180 or 84.9% store their products traditionally while 17 or 8.0% said they store scientifically while 15 or 7.1% of them practice both.

TABLE 4.1.2b (ii) How do you store your products?

Responses from the Respondents at EZEAGU LGA

Responses	No. of Responses	% of Responses
Traditionally	185	87.2%
Scientifically	12	5.7%
Both	15	7.1%
Total	212	100%

From the table above, 185 or 87.2% of the farmers said that they store their products traditionally, while 12 or 5.7% of them use scientific method and 15 or 7.1% of them said they use both methods.

In a bid to find out the mode in which the farmers store their products, the respondents were asked in question number 7, what they use for storage.

TABLE 4.1.2c (i) What do you use for storage?**Responses from the Farmers at UDI LGA**

Responses	No. of Responses	% of Responses
Jute bags	60	28.3%
Barn	120	56.6%
Silos	10	4.7%
Others	22	10.4%
Total	212	100

Out of 212 questionnaires returned 120 or 56.6% of the respondents stored their products in the barn. This method of storage is the most popular in this area of study (Udi LGA) and its usage is restricted to yam storage. Because of lack of an alternative method, this type of storage method of yam storage is used in the area of study.

Silos are not popular method of storage in the area of study (Udi LGA). A silos is a big container that made up of metal and is mounted on top of a concrete and kept under a shade to prevent it from direct sun penetration. Most farmers do not have knowledge of this method of storage, but some of the big farmers have.

Furthermore, jute bag method of storage is very popular in the area of study. This is used in storing grains especially maize, rice and garri. Products stored in this way usually have chances of being spoilt. And this is a primitive way of storing grains.

Jute bags when filled with the products for storage they are stored in a ventilated area for easy circulation of air. In addition, these bags are not normally kept on the bare floor but on top of a plank or any other soft object some distance away from the floor. This is because, it helps to prevent water from rolling or from any pest attack.

Some farmers in this area of study (Udi L.G.A.) said they store their products underground. The products stored in this way is cocoyam. Farmers store their products (cocoyam) under ground until they need them. In most towns in Igbo land, they (farmers) make use of this method very often while harvesting their crops. During the oral interview, the farmers interviewed said that they do prefer leaving their crop (i.e. cassava) in the ground until they have the need for it. This crop can be left in the soil for up to 18 months before harvesting, but this method of storing products is liable to rodent and insect attacks.

Table 4.1.2c (ii) Responses from the farmers at EZEAGU LGA

Responses	No. of Responses	% of Responses
Jute bags	115	54.3%
Barn	55	25.9%%
Silos	15	7.1%
Others	27	12.7%
Total	212	100

From the table above, 115 or 54.3% of the farmers said that they use jute bags while storing their products, 5 or 7.1% of them use silos, 55 or 25.9% of the farmers make use of barns in their storage while 27 or 12.7% of the farmers store their products under ground.

Moreso, the respondents was asked in question number 8 of the questionnaire how scientific their storage is.

Table 4.1.2d (i) Do you use chemical for storage?

Responses from the farmers at UDI LGA

Responses	No. of Responses	% of Responses
Yes	40	80%
No	10	20%
Total	50	100%

From the table above it can be observed that 40 or 80% of the farmers make use of chemicals, when storing their products. But 10 or 20% of them do not make use of chemicals at all.

In table 4.1.2d (ii) farmers from Ezeagu LGA were asked if they make use of chemical when storing their products.

Responses from the farmers at Ezeagu LGA

Responses	No. of Responses	% of Responses
Yes	30	60%
No	20	40%
Total	50	100%

Out of 50 respondents 30 or 60% of them responded “yes” while 20 or 40% of the farmers answered “No” to the questionnaire.

The respondents who answered “Yes” in question 8 were further asked; how is the cost of the chemicals?

Table 4.1.2e (i) How is the cost of chemicals being used?

Responses from the farmers at UDI LGA

Responses	No. of Responses	% of Responses
Costly	30	75%
Moderate	10	25%
Total	40	100%

Out of 40 respondents, 30 or 75% of them said the chemicals used is costly while 10 or 25% of them said that the cost is moderate.

Table 4.1.2e (i) How is the cost of chemicals being used?

RESPONSES FROM THE FARMERS AT EZEAGU LGA

Responses	No. of Responses	% of Responses
Costly	30	100%
Moderate	-	-
Total	30	100%

The whole farmers (i.e. 30 or 100%) said that they use chemicals but it is very costly.

The whole 30 or 100% of the farmers said that they are not happy about it.

Many of the farmers that store scientifically or traditionally complained of pests and diseases attack on their products despite all the precautionary measures. And the farmers said this attack by pests or disease, directly reduced their output. Although, the farmers have promised if they are given an improved method of storage they (farmers) are optimistic about increase in production. Again, they complained of great losses due to lack of good storage facilities and this made them to have low morale in producing more.

Truly stated, this problem of storage system is actually one of the things that is responsible for large amount of wastes that occur in the farms. As a result of these wastes, the farmers are discouraged naturally for putting in their best knowing very well that much of their outputs may be wasted.

4.1.3 PROCESSING

In the studied areas (UDI and EZEAGU LGAs) their method of processing agricultural produce is still very local, and Nigeria in general, is not an exception. The word processing may be defined as the transformation of these agricultural products into other useful useable forms as well as into different patterns of usage.

The development of the food processing industries in Nigeria, hold out great possibilities for the expansion and rationalization of the market for food crops. Food processing minuses or reduces seasonal fluctuations in supply, prices and charges consumer choices and enhances the growth of dietary habits.

Food processing improves to the nutritive content of foods, reduces wastes and spoilage. The natural tendency of every fresh food is to decay or spoils and to over come this problem our food is processed in such a way that the agents of spoilage: enzymes, insects, micro-organisms, oxygen, rodents, excessive heat or cold humidity etc are removed.

In the case of cassava processing it is processed into garri in a traditional way which involves specialization. In the areas of study (UDI and EZEAGU) garri processing is mostly done by women.

involves many processes like boiling, tempering, cleaning, destoning, sorting and polishing. The products of this process are long grain rice, broken grain and bran. These processes must be performed before it could be converted into edible rice. Raw paddy is conveyed from storage into the par boiling plant.

Here the bulk is steamed and passed on to take tempering drying plant. The tempering dryer is an innovation which prevents shock cooling of rice grain by controlling and balancing the moisture distribution within the grain. In doing this, the initiation of cracks is prevented and this percentage of broken grains obtainable is very much reduced.

Tempered grains are pre cleaned and then hulled before the initial separation. That final separation take place coupled with grading, destoning and polishing before bagging. In UDI and EZEAGU Local Government Areas, there are rice mills at Alfa town and Mgbagbu-Owa town respectively.

Coming to yam processing, it is not easily processed, therefore many people (farmers) sell or eat it the same way it is harvested. But only few farmers grind it into yam flour or powder. Though, it is only semi spoilt ones that are grinded and steamed in hot water.

Cassava is converted to and utilized as garri by grinding fermenting and frying by a traditional method.

In UDI LGA, Affa town can be said to be the center of cassava processing. Affa town have more than fifty grinding machines, though all of them operate in small scale and they are labour intensive. Also, we have many grinding machines at other zones but not in large scale.

The method of cassava processing in the studied areas are: the cassava roots are uprooted, peeled when fresh and washed, after that, they can be grinded and the materials obtained are placed in big bags or sacks. Then they will be allowed to ferment under pressure of heavy stones and logs (i.e. local methods) for three to four days. The fermented materials are then sieved to remove coarse fibers and they are fried with continuous stirring over a very slow fire in a flat iron pot called "Agbada" until the (cassava) get dried. This method is not mechanized and it is labour intensive.

In the case of rice processing, it is essential to state clearly that rice grown in the areas of study, is the best of its kind in this nation. This locally produced rice is better in quality than the foreign counterparts when compared with each other. In rice processing it

There are still some special varieties of yam that can be grinded and cooked for instance, water yam (Ibo people called it Ji abana). Because of lack of processing machine for yam: some people prefer to cut the yams into smaller pieces, dry them under the sun for some days or weeks until perfectly dried and then placed in a native mortar and pound with a pestle until they turn into powder.

The researcher wishes to test the farmers responsiveness to the processing method available to them, therefore they were asked in question number 25 how the nature of processing and packaging of the agricultural products in the study areas is?

Table 4.1.3 (i) How is the nature of processing and packaging of your products?

Responses from farmers at UDI LGA

Responses	No. of Responses	% of Responses
Adequate	0	0
Inadequate	160	75.5%
No facilities at all	52	24.5%
I don't know	-	-
Total	212	100%

Reference to the table above, none of the farmers felt that the processing facilities available to them is adequate. But 52 or 24.5% said that there are no facilities at all in the study area. This group of respondents are those that come from the areas of little or no facilities eg. NZE and OGHU towns. Furthermore, majority of the farmers who responded to the question said that there are processing facilities but they are inadequate. This forms 160 or 75.5% of the total respondents.

Again, in Table 4.1.3 (ii) Farmers from EZEAGU LGA were asked how the nature of processing and packaging of the products is? The responses from them are written below

Responses	No. of Responses	% of Responses
Adequate	3	1.3%
Inadequate	170	80.2%
No facilities at all	35	16.5%
I don't know	4	2.0%
Total	212	100%

From the above table, it can be observed that 35 or 16.5% of the farmers said that none is in existence, only 3 or 1.3% said there is

adequate facilities; 170 or 80.2% said that there is inadequate facilities, while 4 or 2.0% maintained that they do not know at all.

Furthermore, in question number 25, the farmers were asked whether they are of the opinion that the processing of agricultural products like (Rice, cassava and yam) can be improved. Truly, almost all the farmers were optimistic that it could be greatly improved if the government can pay more attention to agriculture through financing, research and the provision of necessary processing machine that are better than what the farmers obtain in their areas.

Table 4.1.4: TRANSPORTATION

In agricultural marketing, transportation is as important as the production itself. This is because transportation is another function of marketing that needs consideration. It is an act of transporting goods (wares) from the producers to the buyers or where the goods are needed. Transportation can be termed as a service and without transportation system; there will be no marketing. Long delays in transportation brings about the un avoidable increased cost of goods brought. Although, some of the products are lost in transit for some reasons of long delays, inadequacy of vehicles and even bad roads.

In the areas of study, transportation system is very poor and it is a big concern to the farmers there. Distribution of commodities which should be carried out through transportation is found to be poor and the provision of services has prone to distortion.

Furthermore, to make their products available to the ready market becomes difficult with transportation cost on the top (Skyrocketing). Because of the bad roads condition in UDI and EZEAGU LGAs, prices charged to farmers become too exorbitant. It can be concluded here that the most hindering factor in the areas of study is the lack of efficient access roads to their agricultural farms.

As regards to this, farmers were asked in question number 12: how far their home is from their farm?

Responses from farmers at UDI LGA

Responses	No. of Responses	% of Responses
(0-5)km	61	25.41%
(5-10)km	84	35%
(10-15)km	88	36.6%
(15-20)km	17	7.08%
20 km and above	11	4.58
Total	240	100%

Transportation provides place utility, ease of distribution of the products and reduces total cost.

When the communication network of any nation or town becomes bad, the economic development of the place will be greatly retarded. And marketing of the agricultural products will be affected too hence no one knows what is happening in the next door. It has been observed in the areas of study that almost all the farmers live far away from their farms without good access roads. And this makes it difficult for the farmers to convey their produce to the market. The researcher observed too that some of the major agricultural towns in the areas of study are not linked at all to each other for easy accessibility. For the ones that are linked, the bad condition of the road becomes complex especially during the rainy season as a result of bad roads, the farmers are left to the mercy of the cyclists and the head portrages in carrying their food stuffs or produce.

From the table above (10-15)km is the distance majority of the farmers cover to and from their farm lands. But the closest distance is (0-5)km, which is called home farms. These farms closest to the home are not as fertile as those of long distance farms, and it may be because they are cultivated almost every year.

The responses from farmers at EZEAGU L.G.A on how far is the distance of their farm home are stated below.

Table 4.1.4.(ii) Responses of the farmers from EZEAGU LGA

Responses	No. of Responses	% of Responses
(0-5)km	65	27%
(5-10)km	48	20%
(10-15)km	88	36.7%
(15-20)km	30	12.5%
20 km and above	9	3.8%
Total	240	100%

Out of 240 responses, 65 or 27% of the farmers cover between (0.5)km to their farm, 48 or 20% of them cover between (5-10)km, 88 or 36.7% of them travel (10-15) km, 30 or 12.5% of the farmers cover between (15-20)km, while 9 or 3.8% of the cover between 20km and above to their farm. It is good to remark that (10-15)km is the distance majority of the farmers usually cover each time they go to their farm.

In question number 13, farmers were asked whether there is any motorable road from their home to their farm. Majority of them

answered “NO” to the question and among some that answered in the affirmative in question 13 complained in question 14 of very bad road condition.

Furthermore, in order to ascertain the efficiency of transportation bulk of products carried, question number 16 asked the mode of transportation used. Few said that they use motorcycle, pick up van or lorry and a negligible number use car. Foot and bicycle therefore became the major modes of transporting products (produce) in both study areas.

In question number 17, majority of the farmers agreed that poor transportation facilities affect their transports fares in both UDI and EZEAGU LGA.

Majority of the farmers were of the view in question number 18, that transportation and storage facilities affect the prices of their produce, and it is reflected in the prices paid by the customers and/or consumers (see hypotheses) Transportation and storage facilities are two vital links in the chain of distribution activities required to meet market opportunities for storage and related activities.

The importance of transportation in marketing lies in the fact that farm produce become useful only when the goods reach the target

market (consumer) who buys them in the right farm, at the right place, at the right time, at the right price, and thereby creating income for producers and at the same time satisfying the consumers need and wants

Table 4.1.5 PRICING.

The determinants of agricultural marketing are storage and transportation, due to the seasonality of the agricultural products.

Pricing efficiency depends upon the nature and extent of competition among the traders in the market. The effect of competition are reflected through price.

In the areas of study (UDI and EZEAGU LGA), price is set by the market forces (i.e. forces of demand and supply). During the harvesting season price is considerably low and it is arbitrary high during the off-season. This fluctuating trend results mainly from the lack of storage facilities and legal regulation guiding prices of agricultural products in the local government concerned. The nature of agricultural products contribute to the fluctuations in prices.

The researcher observed that farmers in these areas do not consider prices (wages) of labour applied in the production when they are setting the price of their produce. Because of the above reasons,

the middlemen usually buy off their products at the farm gates during the harvesting time and store to sell them when there is scarcity of the produce in the market. And this enables the middlemen to make excess profit at the expense of the poor farmers. It is important to state here that marketing of farm products gives neither the farmers a fair return on the investments nor the consumers a fair price. The reason is that the pricing system available to the farmers is not organized.

Table 4.1.6: FINANCE

When farmers are in financial difficulties (i.e. short of money) they will find it hard to purchase agricultural inputs and other essential requirements needed in the production of their products. Therefore, funding the farmers for the purpose of marketing agricultural inputs and outputs is very vital. At the beginning of the agricultural production, fund is required for the acquisition of farm implements/inputs such as fertilizers, land, labour, hoes, knives etc.

In the study area (UDI and EZEAGU) almost all the farmers expect few ones are in acute shortage of capital to under take desired level of production. Because of this, they are unable to acquire modern farm equipment. These farmers are still using crude

implements like hoes, cutlasses, machetes, etc which militate against large-scale production.

When the farmers were interviewed, they disclosed that their financial problem was the low income from their agricultural produce. They lamented that only the start up capital (i.e. need money) they could provide at the onset that carried them through production. Though, this does not provide up to 10% of their financial needs.

In order to ascertain from the farmers how buoyant they are in terms of finance, they were asked in question number 26 whether they have financial problem in the production of their produce.

Table 4.1.6 (i) Do you have financial problems in production?

RESPONSES FROM THE RESPONDENTS AT UDI LGA

Responses	No. of Responses	% of Responses
Yes	220	91.7%
No	20	8.3%
Total	240	100%

Table 4.1.6 (ii) Do you have financial problems in production?

RESPONSE FROM RESPONDENTS AT EZEAGU LGA

Responses	No. of Responses	% of Responses
Yes	240	100%
No	-	-
Total	240	100%

With reference to the above table, all the farmers answered “yes” to the question, that means all the respondents experience critical financial problem during farming and harvesting period.

The farmers were further asked in question number 26 what is the nature of their financial problems? The responses from EZEAGU LGA farmers are shown in the table below.

Table 4.1.6(ii) What is the nature of your financial problem?

RESPONSE FROM THE FARMERS AT EZEAGU

Responses	No. of Responses	% of Responses
Low income	160	71.7%
No form on credit facility	35	15.7%
No government assistance	28	12.6%
Total	223	100%

Out of 223 farmers that accepted having financial problem, 160 or 71.7% attributed it to low income from the agricultural products they produce; 35 or 15.7% agreed that there is no form of credit facilities given to the farmers, while 28 or 12.6% said it is as a result of no government assistance.

When further asked in question 27, how does the federal government policy affects the marketing of their agricultural products? The responses from the respondents at UDI LGA were stated below,

Table 4.1.7 i. Does the federal government policy affects marketing of their agricultural products? **RESPONSES FROM RESPONDENTS AT UDI LGA**

Responses	No. of Responses	% of Responses
No	27	12.2%
Yes	165	74.3%
Total	222	100%

27 or 12.2% of the farmers interviewed said that the federal government policy on agriculture is favourable, while 165 or 74.3% complained of the policy and said that it is unfavourable to them.

Table 4.1.7 (ii) Does the federal government policy affects the agricultural produce?

RESPONSES FROM FARMERS AT EZEAGU LGA

Responses	No. of Responses	% of Responses
Yes	175	78.8%
No	47	21.2%
Total	222	100%

Out of 222 farmers interviewed, 175 or 78.8% of them agreed that it affect them and it is due to high interest rates on the loanable funds, while 47 or 21.2% said that it does not.

As regards to this, the farmers were then asked whether they engage or would like to engage in co-operative society (farming), and most of them were confused. It is not an over statement to say that majority of them do not know what co-operative farming is all about except very few independent farmers.

As a result of this, almost all of them don't engage in co-operative farming and marketing. Because of this, they find it very difficult to obtain loans from commercial and agricultural banks.

They lack the collateral (credit facilities) to obtain loans from these banks. Even when the farmers are given the credit facilities, most of them don't know how to get the loans from the banks, as most of them are illiterates.

Despite all this, the truth still remains that no country can claim to be rich (wealthy) unless it can produce enough foodstuffs and feed its citizenry adequately. And that there can not be meaningful economic development and industrial growth without serious transformation of the nations agricultural sector by the governments.

In addition, the problem of acquiring modern farming equipment, storage facilities, transportation, good road, modern markets etc due to lack of fund, should be immediately tackled by the government because of the great danger its neglect poses to the economic development of the local governments concerned in particular and the nation as a whole. This is because the areas under study (UDI and EZEAGU) are the greatest viable areas in Nigeria in terms of agriculture.

PART B

TESTING OF HYPOTHESES

HYPOTHESES 1:

Hi: High interest rates on loans given to farmers induce poor production and marketing of agricultural products

NULL HYPOTHESES

Ho: High interest rates on loans given to farmers do not induce poor production and marketing of agricultural products

TESTING OF HYPOTHESES BY PERCENTAGE

If the respondents who agreed that high interest rates on loans given to farmers induce poor production and marketing of agricultural produce in UDI/EZEAGU LGAs is above 60% of the total respondents, the “Hi” is accepted. And if they are below 60%, the “Hi is rejected and the (Ho) is accepted.

To test this hypotheses, farmers were asked in question number 28, whether the high interest rates on loans given to farmers induce poor production and marketing of agricultural products. The table below shows the details of the responses.

Table 4.2a Do high interest rates on loans given to farmers induce poor production and marketing of agricultural products in the area. of study (UDI/EZEAGU L.G.A.)

RESPONSES FROM RESPONDENTS IN UDI LGA

Responses	No. of Responses	% of Responses
Yes	201	83.75%
No	39	16.25%
Total	240	100%

Table 4.2b

RESPONSES FROM RESPONDENTS IN EZEAGU LGA

Responses	No. of Responses	% of Responses
Yes	188	78.3%
No	52	21.7%
Total	240	100%

From the two tables above, UDI farmers that said yes represent 201 or 83.75% and they agreed that high interest rates on loans given to farmers induce poor production and marketing of agricultural

products, while farmers from EZEAGU that said “yes” represented 188 or 78.3% of the total number of respondents.

Therefore, since 83.75% and 78.3% in both areas, are greater than 60%, we will accept the “H_i” which says that high interest rates induce poor production and marketing of agricultural products. Therefore, the alternative hypotheses is rejected.

TESTING WITH CHI-SQUARE(Z^2)

Chi-square test is used to verify the accuracy of the percentage test. Therefore, the H_i and H_o still remain the same as in the percentage test.

The required level of significant is 0.5 (5% level).

DECISION RULE

Accept the (H_i) hypotheses if the observed chi-square (Z^2) is greater than the calculated chi-square and reject the hypotheses (H_o). If the observed chi-square (Z^2) is less than the calculated chi-square accept the alternative hypotheses (H_o) that is:

If $Z^2_0 < Z^2_c$ accept H_o but if $Z^2_0 > Z^2_c$ reject H_o and accept H_i

TESTS 1 AND 2:

To test the hypotheses with chi-square (Z^2) table, the respondents are classified according to their respective zones in UDI

and EZEAGU LGAs of Enugu State, which were divided into 4 zones by the researcher for the purpose of this research work.

TABLE 4.2 B (i) RESPONDENTS CLASSIFIED ACCORDING TO THEIR ZONE IN UDI LGA

RESPONSES	ZONE A UDI	ZONE B AFFA	ZONE C ABOR	ZONE D UMULUMGBE	TOTAL
Yes	65	53	39	44	201
No	7	9	16	7	39
Total	72	62	55	51	240

CALCULATION OF EXPECTED FREQUENCIES

The expected frequency is calculated from the contingency table of observed frequency as stated below:

$$\text{Expected frequency (i)} = \frac{\text{column total} \times \text{row total}}{\text{Grand total}}$$

“Yes option”

1. expected number of farmers in zone a Udi with “yes” option

$$= \frac{72 \times 201}{240} = 60.30$$

2. expected number of farmers in zone b Affa with “yes” option

$$= \frac{62 \times 201}{240} = 51.93$$

3. expected number of farmers in zone c Abor with “yes” option

$$= \frac{55 \times 201}{240} = 46.06$$

4. expected number of farmers in zone d Umulumbe with “yes” option

$$= \frac{51 \times 201}{240} = 42.71$$

“NO OPTION”

5. expected number of farmers in zone a Udi with “no” option

$$= \frac{72 \times 39}{240} = 11.70$$

6. expected number of farmers in zone b Affa with “no” option

$$= \frac{62 \times 39}{240} = 10.07$$

7. expected number of farmers in zone c Abor with “no” option

$$= \frac{55 \times 39}{240} = 8.94$$

8. expected number of farmers in zone d Umulumgbe with "no" option

$$= \frac{51 \times 39}{240} = 8.29$$

TABLE 4.2 C (i) EXPECTED FREQUENCY TABLE

RESPONSES	ZONE A UDI	ZONE B AFFA	ZONE C ABOR	ZONE D UMULUMGBE	TOTAL
Yes	60.30	51.93	46.06	42.71	201
No	11.70	10.07	8.94	8.29	39
Total	72.0	62.0	55.0	51	240

The formula for the computation of chi-square (Z^2) is

$$Z^2 = \sum \frac{(O-E)^2}{E}$$

Where O = the observed frequency

E = the expected frequency

Σ = summation (sigma) sign (i.e. addition)

TABLE 4.2 D CALCULATION OF CHI-SQUARE (Z^2)

Cell	C	E	(O-E)	(O-E) ²	(O-E) ² /E
1	65	60.30	4.7	22.090	0.366
2	53	51.93	1.07	1.145	0.022
3	39	46.06	-7.06	49.840	1.082
4	44	42.71	1.29	1.664	0.039
5	7	11.70	-4.70	22.090	1.888
6	9	10.07	-1.07	1.145	0.114
7	16	8.94	8.94	79.924	8.940
8	7	8.29	-1.29	1.664	0.201
		240			12.652

$$Z^2 = \sum \frac{(O-E)^2}{E} = 12.652$$

To determine the degree of freedom we use the formula $(c-1)(r-1)$

Where c = the number of columns

r = the number of rows

$$\begin{aligned}
 \text{therefore degree of freedom} &= (c-1)(r-1) \\
 &= (2-1)(4-1) \\
 &= (1)(3) \\
 &= 3
 \end{aligned}$$

from the table of value, the degree of freedom as 3 under 5% (0.05) level of significance = $Z^2_{3,05} = 7.82$ while the observed Z^2 under 5% level of significance = 12.652 $\therefore Z^2_0 = 12.65$ $Z^2_c = 7.82$

$$\therefore Z^2_0 = 12.65 > \therefore Z^2_c = 7.82$$

decision (H₁) is accepted while H₀ is rejected.

TABLE 4.2 B ii RESPONDENTS CLASSIFIED ACCORDING TO THEIR ZONES IN EZEAGU LGA

RESPONSES	ZONE A OGHE	ZONE B OWA	ZONE C OLLO	ZONE D UMANNA	TOTAL
Yes	64	48	35	41	188
No	12	10	15	15	52
Total	76	58	50	56	240

The expected frequency is calculated from the contingency table of observed frequency as stated below.

$$\text{EXPECTED FREQUENCY (F)} = \frac{\text{COLUMN X ROW TOTAL}}{\text{GRAND TOTAL}}$$

“Yes option”

1. Expected number of farmers in Oghe zone with "yes option"

$$= \frac{76 \times 188}{240} = 59.53$$

2. Expected number of farmers in Owa zone with "yes" option

$$= \frac{58 \times 188}{240} = 45.43$$

3. Expected number of farmers in Ollo zone with "yes" option

$$= \frac{50 \times 188}{240} = 39.17$$

4. Expected number of farmers in Umanna zone with "yes" option

$$= \frac{56 \times 188}{240} = 43.87$$

"NO OPTION"

5. Expected number of farmers in Oghe zone with "no" option

$$= \frac{76 \times 52}{240} = 16.47$$

6. Expected number of farmers in Owa zone with "no" option

$$= \frac{58 \times 52}{240} = 12.57$$

7. Expected number of farmers in Ollo zone with "no" option

$$= \frac{56 \times 52}{240} = 10.83$$

8. Expected number of farmers in Umanna zone with “no” option

$$= \frac{56 \times 52}{240} = 12.13$$

RESPONSES	ZONE A OGHE	ZONE B OWA	ZONE C OLLO	ZONE D UMANNA	TOTAL
Yes	59.53	45.43	39.17	43.87	188
No	16.47	12.57	10.83	12.13	52
Total	76.00	58.00	50.00	56.00	240

The formula for the computation of chi-square (Z^2) is

$$Z^2 = \sum \frac{(O-E)^2}{E}$$

Where O = the observed frequency

E = the expected frequency

$\sum$ = summation (sigma) sign (i.e. addition)

TABLE 4.2 D (ii) CALCULATION OF CHI-SQUARE (Z^2)

Cell	O	E	(O-E)	(O-E) ²	(O _i -E _i) ² /E _i
1	64	59.53	4.47	19.98	0.336
2	48	45.43	2.57	6.60	0.145
3	35	39.17	-4.17	17.39	0.444
4	41	43.87	-2.87	8.24	0.188
5	12	16.47	4.47	19.98	1.213
6	10	12.57	-2.57	6.60	0.525
7	15	10.83	4.17	17.39	1.606
8	15	12.13	2.87	8.24	0.679
Total		240			5.136

$$\text{The chi-square } (Z^2) = \sum_{ei} \frac{(O_i - E_i)^2}{E_i} = 5.136$$

To determine the degree of freedom we use the formula $(c-1)(r-1)$

Where c = the number of columns

r = the number of rows

$$\begin{aligned} \text{therefore degree of freedom} &= (c-1)(r-1) \\ &= (2-1)(4-1) \\ &= (1)(3) = 3 \end{aligned}$$

The degree of freedom from the table value, as 3 under 5% (0.05) level of significance = $(Z^2_{3,0.05}) = 7.82$ while the observed $Z^2_0 = 5.136$ respectively. That is $Z^2_0 = 5.136$ $Z^2_c = 7.82$

$$\therefore Z^2_c < Z^2_0 \text{ i.e. } Z^2_c = 7.82 > Z^2_0 = 5.136$$

Decision (H₀) is accepted while (H₁) is rejected.

H₀ means alternative hypotheses.

Hypotheses II

This hypotheses states that farmers are not satisfied with the general price level and the income they receive for their products.

To test this, the researcher made use of answers from the questionnaire on question number 23, which tried to ascertain from the farmers, their mind about the general price level/income they receive from their produce, taking into consideration the costs involved in production exercise.

TABLE 4.2E (I) UDI LGA RESPONSES ON THE GENERAL
PRICE LEVEL/INCOME

Zone	Head office	Satisfactory	Un Satisfactory	Indifferent
A	Udi	23	43	6
B	Affa	18	40	4
C	Abor	9	45	1
D	Umulungbe	3	48	0
TOTAL		53	176	11

The above table can be translated for easy interpretation in the table
4.2f (i) below:

Table 4.2f (i)

Satisfactory	Un Satisfactory	Total
23	43	66
18	40	58
9	45	54
3	48	51
53	176	229

$$1. \quad \text{Degree of freedom} = (c-1)(r-1)$$

Where c = the number of columns

r = the number of rows

1. level of significance use 1% limit

2. If $Z_o^2 > Z_c^2$ accept H_1 , but

If $Z_o^2 < Z_c^2$ accept H_0

$$\text{EXPECTED FREQUENCY (E)} = \frac{\text{column total} \times \text{row total}}{\text{Grand total}}$$

Grand total

“SATISFACTORY ANSWERS”

1. Expected number of farmers in zone a Udi with “Satisfactory answer”

$$= \frac{53 \times 66}{229} = 15.28$$

2. Expected number of farmers in zone b Affa with “Satisfactory answer”

$$= \frac{53 \times 58}{299} = 13.42$$

3. Expected number of farmers in zone c Abor with “Satisfactory answer”

$$= \frac{53 \times 54}{299} = 12.50$$

4. Expected number of farmers in zone d Ukehe with
“Satisfactory answer”

$$= \frac{53 \times 51}{299} = 11.80$$

“UNSATISFACTORY ANSWER”

5. Expected number of farmers in zone a Udi with
“Unsatisfactory answer”

$$= \frac{176 \times 66}{299} = 50.72$$

6. Expected number of farmers in zone b Affa with
“Unsatisfactory answer”

$$= \frac{176 \times 58}{299} = 44.58$$

7. Expected number of farmers in zone b Affa with
“Unsatisfactory answer”

$$= \frac{176 \times 54}{299} = 41.50$$

8. Expected number of farmers in zone b Affa with
“Unsatisfactory answer”

$$= \frac{176 \times 51}{299} = 39.20$$

TABLE 4.2g (i) EXPECTED FREQUENCY

Responses	Udi	Affa	Abor	Ukehe	Total
Satisfactory	15.28	13.42	12.50	11.80	53
Unsatisfactory	50.72	44.58	41.50	39.20	176
	66.00	58.00	54.00	51.00	229

TABLE 4.2 h (i) CALCULATION OF CHI-SQUARE (Z^2)

Cell	O	E	(O-E)	(O-E) ²	(O-E) ² /Ei
1	23	15.28	7.72	59.60	3.90
2	18	13.42	4.58	21.00	1.56
3	9	12.50	-3.50	12.25	0.98
4	3	11.80	-8.80	77.44	6.56
5	43	50.72	-7.72	59.60	1.18
6	40	44.58	-4.58	21.00	0.47
7	45	41.50	3.50	12.25	0.30
8	48	39.20	8.8	77.44	1.98
Total	229				16.93

$$\frac{\sum (O-E)^2}{c} = 16.93$$

therefore $Z^2_{\alpha} = 16.93$

To determine the degree of freedom using

$$(c-1)(r-1) = (4-1)(2-1) = (3)(1) = 3$$

The observed Z^2 under 0.01 (1%) level of significance and the degree of freedom (df) as 3 $Z^2_c(0.01) = 11.345$; $Z^2_o = 16.93$

$$Z^2_o > Z^2_c \therefore Z^2_o = 16.93 > Z^2_c = 11.35$$

$$\therefore 16.93 > 11.35$$

Therefore, the hypotheses (H_1) is accepted which implies that farmers are not satisfied with the price and income they receive for their products.

SECTION B EZEAGU LGA

TABLE 4.2E (II) RESPONSES ON THE GENERAL PRICE LEVEL AND INCOME FROM EACH ZONE

RESPONSES FROM FARMERS AT EZEAGU LGA

Zone	Head office	Satisfactory	Unsatisfactory	Indifferent
A	Oghe	20	45	5
B	Owa	21	38	0
C	Olo	10	44	2
D	Umanna	4	50	5
TOTAL		55	177	12

The above table can be translated for easy interpretation in the table 4.2f (ii) below:

Table 4.2f (ii)

Satisfactory	Un Satisfactory	Total
20	45	65
21	38	59
10	4	54
4	50	54
55	177	232

Hypotheses (H_1): states that farmers are not satisfied with the price/income they receive for their products.

TEST STATISTICS: CHI-SQUARE (Z^2_c) CONTINGENCY TABLE

i. Degree of freedom = $(c-1)(r-1)$

Where r = the number of rows

c = the number of columns

ii. level of significance use 1% limit

iii. If $Z^2_o > Z^2_c$ accept H_1 , but

iv. If $Z_{\alpha}^2 < Z_{\alpha}^2$ accept H_0 .

$$\text{EXPECTED FREQUENCY (E)} = \frac{\text{column total} \times \text{row total}}{\text{Grand total}}$$

“SATISFACTORY ANSWERS”

1. Expected number of farmers in zone a Oghe with “Satisfactory answer”

$$= \frac{55 \times 65}{232} = 15.41$$

2. Expected number of farmers in zone b Owa with “Satisfactory answer”

$$= \frac{55 \times 59}{232} = 13.99$$

3. Expected number of farmers in zone c Ollo with “Satisfactory answer”

$$\frac{55 \times 54}{232} = 12.80$$

4. Expected number of farmers in zone d Umanna with “Satisfactory answer”

$$= \frac{55 \times 54}{232} = 12.80$$

“Unsatisfactory answer”

5. Expected number of farmers in zone a Oghe with
“Unsatisfactory answer”

$$= \frac{177 \times 65}{232} = 49.59$$

6. Expected number of farmers in zone b Owa with
“Unsatisfactory answer”

$$= \frac{177 \times 59}{232} = 45.01$$

7. Expected number of farmers in zone c Ollo with
“Unsatisfactory answer”

$$= \frac{177 \times 54}{232} = 41.20$$

8. Expected number of farmers in zone d Umanna with
“Unsatisfactory answer”

$$= \frac{177 \times 54}{232} = 41.20$$

Table 4.2g (ii) expected frequency table

Responses	Oghe	Owa	Ollo	Umanna	Total
Satisfactory	15.42	13.99	12.80	12.80	55.00
Unsatisfactory	49.59	45.01	41.20	41.20	177.00
	65.00	59.00	54.00	54.00	232

TABLE 4.2 h (i) CALCULATION OF CHI-SQUARE (Z^2)

Cell	0	ei	(oi-ei)	(oi-ei) ²	(oi-ei) ² /ei
1	20	15.41	4.59	21.07	1.367
2	21	13.99	7.01	49.14	3.510
3	10	12.80	-2.80	7.84	0.613
4	4	12.80	-8.80	77.44	6.050
5	45	49.59	-4.59	21.07	0.425
6	38	45.01	-7.01	49.14	0.022
7	44	41.20	2.80	7.84	0.024
8	50	41.20	8.80	77.80	1.890
Total	232				13.901

$$\frac{\sum (oi-ei)^2}{ei} = 14.0$$

$$\text{Therefore } Z_o^2 = 14.0$$

To determine the degree of freedom using

$$(c-1)(r-1) = (4-1)(2-1) = (3)(1) = 3$$

The observed Z^2 under 0.01 (1%) level of significance and the degree of freedom (df) as 3 = Z_o^2 14.0

$$Z_c^2 = 11.35$$

$$\therefore Z_o^2 > Z_c^2$$

$$\therefore 14 > 11.35$$

Therefore, the hypotheses (H_{ii}) is accepted which implies that majority of farmers are not satisfied with the price and income they receive for their products.

HYPOTHESES III

This hypotheses states that there is a positive correlation between the availability of storage/preservation facilities and increase in food production.

In the questionnaire distributed, the respondents were asked in question number 18 (b), if they would increase their production output if storage methods are improved or provided.

RESPONSES FROM BOTH UDI AND EZEAGU FARMERS ARE STATED BELOW

TABLE 4.21(I) RESPONSES FROM FARMERS AT UDI LGA

RESPONSES	No of responses	% of responses
Yes	170	70.83%
No	33	13.75%
I don't know	37	15.42%
Total	240	100.00%

Table 4.2j (i) the above data can be translated thus:

RESPONSES	UDI	AFFA	ABOR	Umulumgbe	TOTAL
There is a positive correlation between availability of storage facilities and increase food production	48	35	54	45	182
There is no correlation	15	8	3	6	32
Total	63	43	57	51	214

The above table 4.2j (i) can be represented as table 4.2k(i)

Town	X	Y	X ²	Y ²	XY
Udi	48	15	2304	225	720
Affa	35	8	1225	64	280
Abor	54	3	2916	9	162
Umulumgbe	45	6	2025	36	270
Total	182	32	8470	334	1432

Hypothesis (H_i): there is a positive correlation between the availability of storage facilities and increase food production.

Null hypothesis (H₀): there is a negative correlation between the availability of storage facilities and increase food production.

Prove: $y = a + bx$; $a = y - bx$

$$\therefore b = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2} \text{ where } n = \text{total number}$$

$n = 4$	$\Sigma x \Sigma y = (182)(32) = 5824$
$\Sigma x = 182$	$\Sigma xy = 1432$
$\Sigma y = 32$	$(\Sigma x)^2 = 182^2 = 33124$
$\Sigma x^2 = 8470$	

$$b = \frac{n \Sigma xy - \Sigma x \Sigma y}{n \Sigma x^2 - (\Sigma x)^2} = \frac{4(1432) - 5824}{4(8470) - 33124}$$

$$b = \frac{5728 - 5824}{33880 - 33124} = \frac{-96}{756}$$

$$b = \frac{96}{756} = -0.126984 = \underline{\underline{-0.13}}$$

Therefore, - 0.13 is within the range of - 1, the alternative hypotheses (H0) which states that there is a negative correlation between the availability of storage facilities and increase food production will be accepted while (H1) will be rejected.

Farmers from UDI LGA of Enugu State said that they will not increase their production output even if adequate/modern storage facilities are provided to them.

Because, they hardly receive financial assistance from the governments concerned.

TABLE 4.21 (II) RESPONSES FROM FARMERS AT EZEAGU
LGA

RESPONSES	No of responses	% of responses
Yes	173	72.10%
No	32	13.40%
I don't know	35	14.60%
Total	240	100.00%

The above data can be translated thus

Table 4.2j (ii)

RESPONSES	Oghe	Owa	Ollo	Umanna	TOTAL
There is a positive correlation between availability of storage facilities and increase food production	49	36	52	43	180
There is no correlation	15	8	5	9	37
Total	64	44	57	52	217

The above table 4.2j (ii) is hereby represented as follows

Table 4.2k (ii)

Town	X_i	Y_i	X_i^2	Y_i^2	$X_i Y_i$
Oghe	49	15	2401	225	735
Owa	36	8	1296	64	288
Olo	52	5	2704	25	260
Umanna	43	9	1849	81	387
Total	180	37	8250	395	1670

Hypotheses (H_i): states that there is a positive correlation between the availability of storage facilities and increase food production.

Null hypotheses (H_o): states that there is no correlation between the availability of storage facilities and increase food production.

PROVE OF RELATIONSHIPS OF THE HYPOTHESES TESTED

$$Y = a + bx; a = y - bx$$

$$\text{Formula } b = \frac{n \sum x_i y_i - \sum x_i \sum y_i}{n \sum x^2 - (\sum x)^2}$$

$$N = 4$$

$$\sum x_i = 180$$

$$\sum y_i = 37$$

$$\sum x_i \sum y_i = (180)(37) = 6660$$

$$\sum x_i y_i = 1670$$

$$(\sum x_i)^2 = (180)^2 = 32400$$

$$\sum x_i^2 = 8250$$

$$b = \frac{n \sum x_i y_i - \sum x_i \sum y_i}{n \sum x_i^2 - (\sum x_i)^2}$$

$$b = \frac{4(1670 - 6660) = 6680 - 6660}{4(8250 - 32400) = 33000 - 32400} = \frac{20}{600}$$

$$1/30 = 0.033$$

Therefore, 0.033 is within the range of + 1 and (H₁) which states that there is positive correlation between the availability of storage facilities and increase food production will be accepted while H₀ will be rejected.

CHAPTER FIVE

5.0: SUMMARY, RECOMMENDATION AND CONCLUSION

The purpose of this chapter is to tie up all the loose ends by a way of summary of findings, areas of further research and recommendations as to how best to improve upon the problems that militate against the marketing of agricultural products (Rice, yams and cassava) in UDI and EZEAGU Local Government Areas of Enugu State.

5.1: SUMMARY OF FINDINGS

At the time the research work was being carried out, the researcher found that there were a lot of problems that militate against the production, efficient distribution and marketing of agricultural products. These problems were analysed thus

HYPOTHESES I

High interest rates on loans given to farmers induce poor production and marketing of agricultural products. The researcher found that the federal government policy on interest rates on agricultural loans given to farmers militated against the production and marketing of agricultural products like rice, yam, cassava etc. in the said areas of study. Furthermore, the researcher also recognized

the efforts the farmers put in, in bringing their produce to the market from their various houses. The importance of good network of roads cannot be over emphasized. The researcher found that the roads were very bad and the farmers find it difficult to transport their produce. In addition, the transportation cost was so high that only the cost takes the little profits they make from the sale of the produce.

Moreso, if the communication network is good to a great extent, it will help reduce the cost/price of the produce. From the surveys conducted, therefore, majority of the farmers in both UDI LGA and EZEAGU LGA confirmed that lack of storage and transportation facilities affect the prices of their products.

HYPOTHESES II

Farmers are not satisfied with the prices and income they receive for their products. The researcher found that due to lack of good storage and transportation facilities plus high cost of labour in both studied areas, the farmers don't receive adequate income and prices from their products. So, the surveys conducted in both areas, confirmed that 176 or 76.86% and 177 or 76.29% of the farmers in UDI and EZEAGU LGAs respectively, are not satisfied with the price and income they receive for their products. In both studied areas, the

researcher observed that the farmers are willing to increase their production outputs, if the federal government reduces high interest rates on agricultural loans being given to them.

HYPOTHESIS III

There is a correlation between the availability of storage/preservation facilities and increase in food production. From the surveys conducted, it was found that UDI farmers would not increase their production output, even if the improved storage/preservation facilities were given to them hence there is a negative correlation while farmers at Ezcagu LGA agreed there is a positive correlation between the availability of storage facilities and increase in food production.

OTHER FINDINGS

USE OF CRUDE IMPLEMENTS

In our society today, technology has gone into an advanced stage, hence the use of old implements should have long been taken by civilization at both studied areas, the farmers still use hoes in planting. Infact, the extent of manual labour they put in reduced their production capacity and it is labour intensive. But majority of the farmers still farm like the farmers of the old; and only very few rich

farmers can provide tractors for themselves. Efficiency can be attainable if modern farm implements are distributed to the farmers at an affordable price.

FINANCIAL CONSTRAINTS

Truly, the farmers in the studies areas (UDI and EZEAGU LGAs), complained of financial constraints. There is a lot to Rice, yam and cassava production, and as such attracts heavy amount, and due to lack of finance, the farmers are not in position to produce efficiently and profitably.

For effective production and marketing of agricultural produce, the farmers should be provided loans at a reduce rate by the federal government and commercial banks to enable them to perform better.

PRICE INSTABILITY

The causes of price instability at the areas of study were not far fetched. Some of the reasons can be attributed to natural hazard, pests, insects, poor soil etc. Others include, cost of production and seasonality of the produce, lack of efficient storage and preservation facilities.

These uncertainties make it very difficult for the farmers to plan in advance on what actions to take. Furthermore, as a result of

high illiteracy of some of the farmers, they were not able to incorporate all the relevant costs of production, cost of labour etc. which should be considered before setting the profit margin of the products and as a result prices can be below costs or slightly above cost.

LACK OF MARKET INFORMATION

Due to lack of market information farmers most at times, do not know the actual and potential buyers of their products. Usually, the farmers direct their produce to buyers who do not want/care to buy them and they even sell at a reduced price. Majority of the farmers are not adequately informed of the current market conditions and this results in wastage and losses. There is also the lack of information between the farmers and the governments, and as a result, the farmers could not be easily reached for assistance.

This lack of information seriously affect perishable goods, because they might carry their produce to distant markets and may not find enough markets (actual and potential buyers) for the produce.

HIGH COST OF LABOUR

Because of high cost of labour, the people employed to assist the farmers charge very high price which farmers cannot avoid. As a result, it reduces their moral and production capacity.

CO-OPERATIVE SOCIETY

From the surveys conducted, the researcher found that most of the farmers do not engage in any co-operative society. But they express their willingness to join any, if they find the opportunity. Being members of co-operative society helps to achieve greater output of production. Co-operative society helps to make a steady price of farmers produce and can as well make the produce cheaper.

PROCESSING FACILITIES

According to the researcher, it was revealed that the processing facilities in the studied areas are inadequate and cannot be relied upon to convert the agricultural products into other uses.

PEST DISTURBANCE

Reasonable efforts have been made by the federal, state, local government and the general public at boosting agricultural production in the country.

But it seems their efforts are being sabotaged by pests and diseases which causes huge crops losses annually. For this reason, all hands should be on deck to reduce the huge losses encountered annually.

LACK OF AGRICULTURAL LOANS

Majority of the farmers attested to the fact that there is no form of government loan that is given to them. But only a few of them said that they have once received the loan with high interest rates and since then they have not been given another loan.

Since the farmers are hampered by finance, the governments concerned should endeavour to provide them with agricultural loan at a reduce rate so that they can produce more and to serve as an inducement.

In addition, required chemicals and fertilizers should be supplied to the farmers on time in order to boost production output.

5.2: RECOMMENDATIONS

If agricultural productivity is to be increased and the incomes and standard of living of rural dwellers uplifted, then integrated development projects should be pursued with greater enthusiasm. Efforts should therefore, geared towards the improvement of

agricultural outputs in the nation through the local government sectors and commercial/community banks. Though, governments, individuals and co-operate bodies should contribute their shares towards this project.

Also farmers should be assisted with improved and high yielding varieties of crops, pesticides, tractors hire, services, credit facilities on favourable terms including infrastructure facilities such as roads networks, adequate water supply and good health care. These destructive pests can be controlled by means of procuring necessary insecticides, and distributing same to the farmers at subsidized rates. Again, provision of modern storage facilities e.g. silos for grain, should be supplied by the governments. All these and more should be treated with emergency especially the case of loans facilities and tractor hire/services.

As observed that most of the farmers were not trained, they should be given training on how to use insecticides and fertilizers, so that they can take adequate precautions, since they may run the risk of poisoning themselves, consumers and/or destroying some beneficial insects including the environments.

Agricultural loans should be given to farmers without security and at a reduced interest rates. This can be seen as boost to make the country self-sufficient in food production. This is also inconsonance with efforts to make Nigerian self-reliance and restoring the nations status as an agricultural food exporter.

This scheme can be for the peasant farmers who dominate the farming populations, but who have for long neglected. This will even be indicative of the government's genuine commitment towards revolutionising the agricultural sector.

The farmers should engage in agricultural co-operative. This co-operative demands sacrifice of the managerial sovereignty of individual farm household in their farming operations in favour of a group of such households of the representatives, their sacrifice being justified as promoting their common well being.

There are some benefits of agricultural co-operatives such as:

1. Having access to larger farmland, which is not possible under individual system.
2. The issue of lack of capital becomes thing of the past.
3. It is easier to locate and deal with the members etc.

The establishment of specialized institutions like the Nigerian Agricultural and co-operative Bank (NACB) to cater for the specific needs of both small and medium scale farmers should be pursued with more vigour. Also, they should give loans to individual farmers, co-operatives farmers, corporate bodies etc indirectly by granting such loans through state, local governments and/or possibly community banks. Again, the Central Bank of Nigeria (CBN) should consider increasing the minimum proportion of its loans granted to farmers through banks.

Governments should modify some of the policies that had been found militating against the efforts of the farmers to turn the country around food production. Standardisation of farm equipment, bulk purchase of parts and farm inputs as well as joint funding research projects should be pursued vigorously by all concerned.

Adequate marketing information should be provided to solve the problem of marketing products at already saturated (satiated) markets.

There should be a reasonable price stability for the product, and adequate storage facilities should be provided to counter the problem of inadequate storage facilities by farmers.

As the majority of the farmers are illiterates, there should be educational programme for them. This will eliminate the problem of illiteracy in marketing of agricultural products.

Credit facilities should be made available to the farmers. This is because adequate credit facility is one of the main requirements for increased food production and greater marketing efficiency. Also some credit facilities should be advanced to the farmers to help them to hold their harvest for a better price and not to unload their entire crop on a depressed market. The farmers should use the advanced credits to pay for their harvest expenses and other pressing debts arising from production. Above all, these credit facilities will enable the farmers to plan their operations well and improve their marketing systems.

5.3: CONCLUSIONS

Marketing, as a commercial process performs a lot of functions to the society especially in areas of physical distribution of agricultural produce from the producers to the final consumers/users so as to satisfy wants/needs through exchange process. In order to market agricultural products well, it therefore, requires intellectual marketing so as to achieve marketing mastery, and gain

transformational marketing power and capacity for accomplishment of extra-ordinary marketing performance. In the studied areas (UDI and EZEAGU LGAs) the surveys revealed that the system of agricultural produce marketing lacks the fundamental ingredients needed for the arrival of a consumer-oriented agricultural marketing. Although, the problems of finance, storage, pests and diseases, use of crude implements, price instability, agricultural loans, high interest rates on loans and poor transportation facilities affect agricultural produce marketing in both UDI and EZEAGU local government areas of Enugu State. To have increased food production, it requires efficient utilization of all available resources to maximize efficiency.

And production efficiency reflects proper use of resources and production, and this ensures maximum output at minimum cost. Governments failure to attain the policy objective of self-sufficiency in food production, there is need to re-appraise Nigeria's food production potentials in our domestic production through efficient use of available relevant resources.

5.4: AREAS OF FURTHER RESEARCH

The areas of further research include the followings:

1. USE OF MECHANIZED IMPLEMENTS

Through the use of mechanized farm implements for agriculture gives rise to mechanized agriculture. This helps to alleviate the problems of intensive manual labour and cost leading to low productivity.

2. ESTABLISHMENT OF EDUCATIONAL INSTITUTION

The farmers educational background is very poor and as such, requires the introduction of adult education for them so that they can cope with the mechanized agriculture.

3. PROVISION OF MODERN FACILITIES

The use of modern facilities should also be encouraged to alleviate the sufferings of the peasant farmers and modern marketing in the field of distribution, storage, transportation, financing, processing, communication, and other functions.



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**A COMPARATIVE ANALYSIS OF UDI AND EZEAGU
LOCAL GOVERNMENT AREAS**

Department of Marketing
Faculty of Business Admin.
University of Nigeria
Enugu Campus

1st February, 2002

Dear Sir or Madam,

I am carrying out a study on: **the problem and prospects of marketing of agricultural products (Rice, Yams and Cassava) in Enugu State.**

This study is in partial fulfillment of the requirements for MBA Degree in Marketing. As in any study, the reliability of the findings depends heavily on your honest co-operation. Your name will not be mentioned; individual answers will be used only in accomplishing this study to ensure anonymity.

I count on your understanding and co-operation.

God bless.

Yours sincerely,

**OCHI, GODWIN EZIEKE
PG/MBA/99/30784**

Answer or tick (✓) as appropriate, please

Section A: personal data

1. What is your sex?

(a) Male ☐

(b) Female ☐

2. What is your age bracket

(a) 15 – 25 years ☐

(b) 26 – 35 years ☐

(c) 36 – 45 years ☐

(d) 46 and above ☐

3. Marital status

(a) Married ☐

(b) Unmarried ☐

4. What is your occupation?

(a) Farmer ☐

(b) Trader ☐

(c) Business executive ☐

(d) Skilled worker ☐

(e) Others (specify) ☐

5. What is your educational qualification?

- (a) Above masters degree level ☐
- (b) Masters degree level ☐
- (c) First degree level ☐
- (d) WASC/GCE level ☐
- (e) Non-formal education ☐
- (f) Others (specify) -----

SECTION B

1. What is the size of your farm?

- (a) Large scale ☐
- (b) Medium scale ☐
- (c) Small (Subsistence) scale ☐

2. What is the general output of agricultural products (Rice, Yam and Cassava) in Udi and Ezeagu L.G.A.?

- | | UDI | EZEAGU |
|-----------------------|--------------------------|--------------------------|
| (a) Decreasing output | ☐ | ☐ |
| (b) Increasing output | ☐ | ☐ |
| (c) I don't know | ☐ | ☐ |

3. If the output has been increasing, why the increasing?

	UDI	EZEAGU
(a) Low cost of production	☐	☐
(b) Improved soil fertility	☐	☐
(c) Availability of good feeder roads	☐	☐
(d) Easy method of processing	☐	☐

4. If the output is on the decrease, why?

	UDI	EZEAGU
(a) High cost of production	☐	☐
(b) Lack of good feeder roads	☐	☐
(c) Lack of improved soil fertility	☐	☐
(d) Lack of land	☐	☐

5. Do you store your products?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

6. If your answer to question 10 above is "yes" how do you store them?

	UDI	EZEAGU
(a) Traditionally	☐	☐
(b) Scientifically	☐	☐
(c) Both	☐	☐

7. What do you use for the storage?

	UDI	EZEAGU
(a) Jute bags	☐	☐
(b) Barn	☐	☐
(c) Silos	☐	☐
(d) Others (specify) -----		

8. Do you use chemicals for storage?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

9. If the answer to question 13 is "yes" how is the cost of the chemical?

	UDI	EZEAGU
(a) High cost	☐	☐
(b) Moderate cost	☐	☐
(c) Low cost	☐	☐

10. Are your stored products usually attacked by pests and diseases?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

11. If storage methods are improved would you increase your production output?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐
(c) I don't know	☐	☐

12. How far are the farm located from the towns/villages?

	UDI	EZEAGU
(a) (0-5) km	☐	☐
(b) (5-10) km	☐	☐
(c) (10-15) km	☐	☐
(d) (15-20) km	☐	☐
(e) (20 and above)	☐	☐

13. Are the roads from your home to your farms motorable?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

14. How is the condition of the roads generally?

	UDI	EZEAGU
(a) Very very good	☐	☐
(b) Very good	☐	☐
(c) Good	☐	☐
(d) Bad	☐	☐
(e) Worse	☐	☐

15. What is the distance between your town/farm and the nearest market you sell your produce?

	UDI	EZEAGU
(a) (0-5) km	☐	☐
(b) (5-10) km	☐	☐
(c) (10-15) km	☐	☐
(d) (15 km and above	☐	☐

16. What is the distribution channels, you use in marketing your agricultural products?

	UDI	EZEAGU
(a) By foot	☐	☐
(b) Motorcycle	☐	☐
(c) By bicycle	☐	☐
(d) Motor vehicle	☐	☐

17. Do poor transportation facilities affect your transport fares?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

18. Do transportation and storage affect the prices of your products?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

18 (b) Would you increase your production output, if storage methods are improved/provided

	UDI	EZEAGU
(c) Yes	☐	☐
(d) No	☐	☐

19. Do you take your produce direct to the market?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

20. If your answer to question 19 is "No" do you sell through middlemen?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

21.If you sell through the middlemen what do you have to say about them?

	UDI	EZEAGU
(a) Co-operative	☐	☐
(b) Exploitative	☐	☐
(c) I don't know	☐	☐

22.Is there any ready market for these products?

	UDI	EZEAGU
(a) Yes	☐	☐
(b) No	☐	☐

23.What is your opinion about the general price level of agricultural products (yam, rice and cassava)?

	UDI	EZEAGU
(a) Satisfactory	☐	☐
(b) Unsatisfactory	☐	☐
(c) I don't know	☐	☐

24.How stable are the prices of your products?

	UDI	EZEAGU
(a) Very stable	☐	☐
(b) Not stable	☐	☐

25. How is the processing and packaging of your products?

	UDI	EZEAGU
(a) Adequate	☐	☐
(b) Inadequate	☐	☐

26. What is the nature of your financial problems?

	UDI	EZEAGU
(a) Low income	☐	☐
(b) No credit facilities	☐	☐
(c) No government assistance	☐	☐

27. How does the federal government policy affect marketing of agricultural products?

	UDI	EZEAGU
(a) Favourable	☐	☐
(b) Unfavourable	☐	☐
(c) I don't know	☐	☐

28. What are the effects of high interest rates or exchange rates on agricultural products?

	UDI	EZEAGU
(a) Small loan obtained	☐	☐
(b) Big loan obtained	☐	☐
(c) No loan obtained	☐	☐

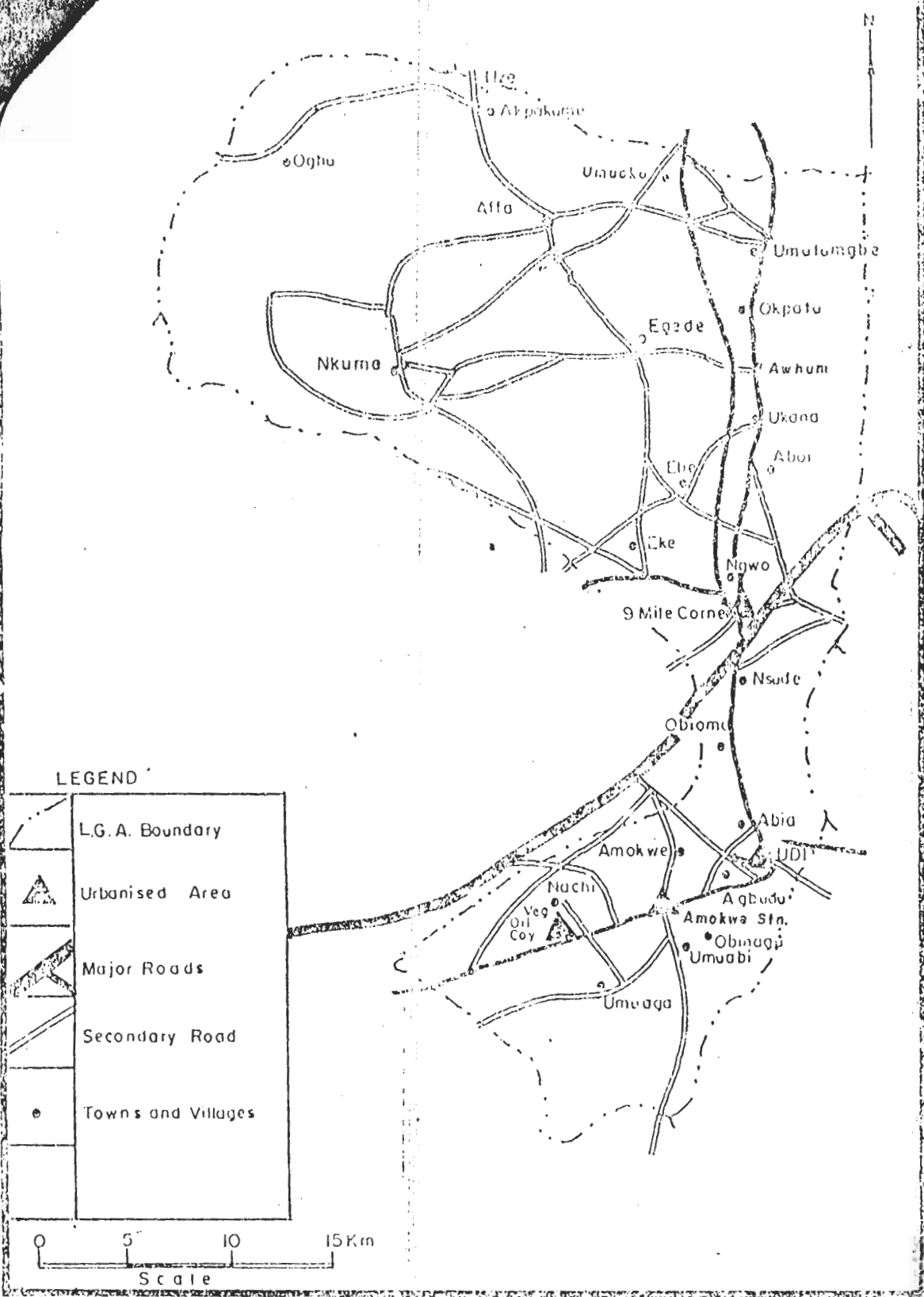


Fig. 6 : MAP OF UDI LOCAL GOVT. AREA SHOWING URBANIZED AREAS .

7° 15' E



L. G. AREA BOUNDARY

ROADS

RIVERS

Morkel .

L.G. A. HEADQUARTER

TRACKS



UMUDIM OLO

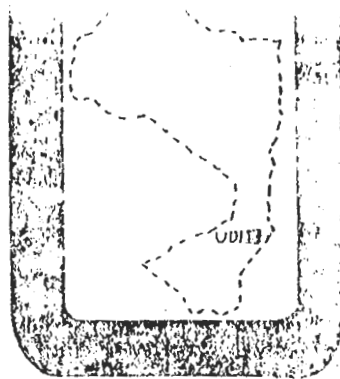


AGUOBU OWA

TRACKS

maiden
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Vol. I No. 1 Sept. 1990



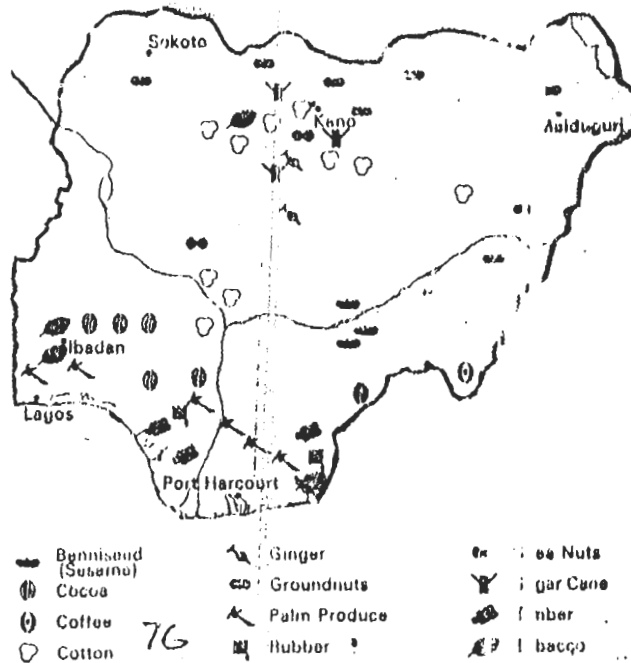
SPOTLIGHT

ON

UDIA

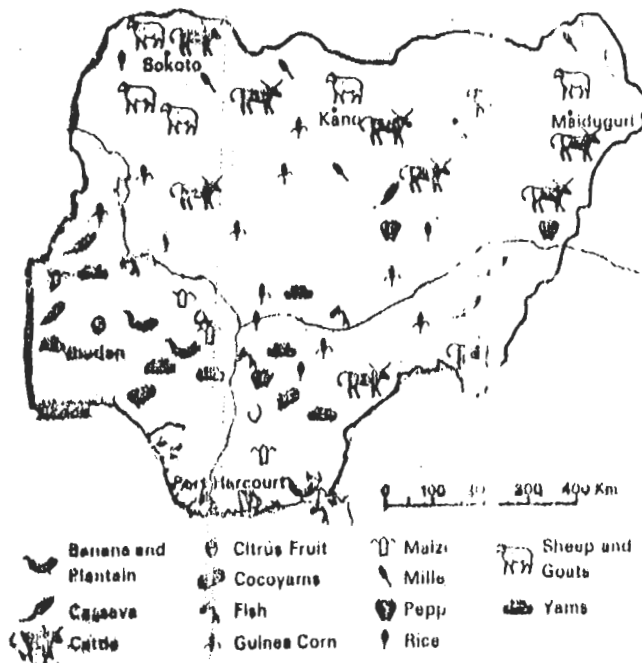
SPECIAL GOVERNMENT AREA

A MAGAZINE OF UDIA L.C.A. AND ITS PEOPLE

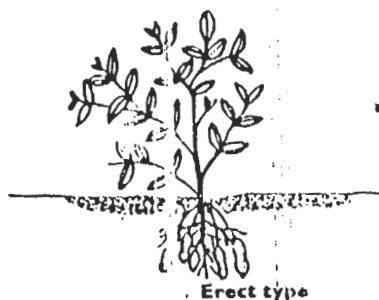
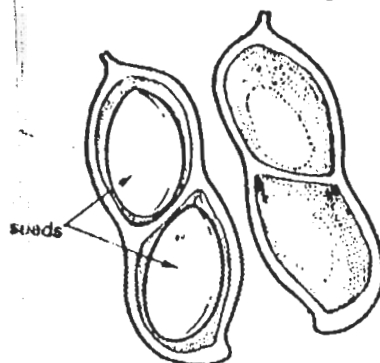


Food crops

Food crops are chiefly grown for food. Rice, yams, cassava, millet, guinea corn, maize, potatoes, plantain, cow peas, pepper, tomatoes, coconuts, onions, fruits and vegetables are our main food crops.



Grandaunt Seeds inside a Split Shell



Erect type



Runner type

Groundnut
(erect type, branched
and bushy)



Cassava Bacteria Blight (CBB)

Root rot:

Leaf spot: Appears as yellow spot on leaves. These spots later turn black, rendering the leaves non-productive and the yields are therefore reduced. Cuttings from infected plants should not be used for the preparation of stem cuttings.



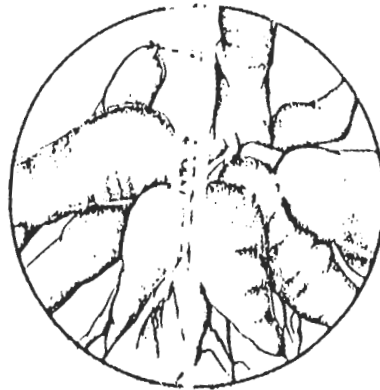
cane rat or cutting grass
(*Turyanomys swinderianus*)



West African
ground squirrel
(*Xerus erthyropus*)



giant rat
(*Cricetomys gambianus*)

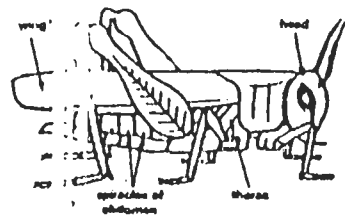


Common Rodent Pests of Cassava:

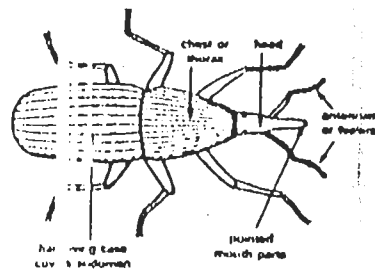
Mexican
 ivated
 supply

oe local
 ch Institut
 gh breeding

The Male Flowers of Maize and Female Flower of Maize :



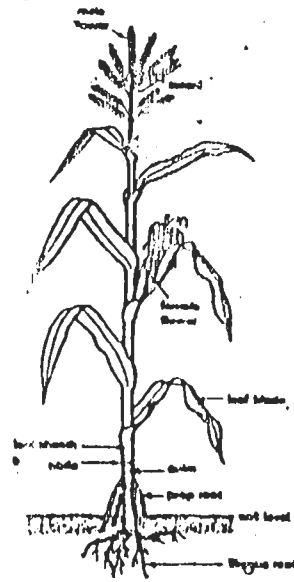
(a)



(a) A locust (b) a weevil



maize
 - a cereal crop



VS:

granules in Requirement: Maize grows well on well drained loamy and deep sandy loam, silt
 clay loam soil with high content of organic matter and plant nutrients. The soil

A
 U
 V
 W
 X
 Y
 Z

Common Pests of Yam:



White yam



variegated grasshopper
(*Zoniocerus variegatus*)



eelworm
(*Anguillulina*)



yam beetle
(*Metoderus malv*)

Simple Farm Tools and Agricultural Machinery

