

**MARKETING OF FERTILIZER IN
KADUNA NORTH LOCAL
GOVERNMENT AREA: THE ROLE OF
FARMERS' CO-OPERATIVE SOCIETIES**

BY

JAMES RUNI

SEPTEMBER, 1999

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K A D U N A N O R T H L O C A L
GOVERNMENT AREA: THE ROLE OF
FARMERS' CO-OPERATIVE SOCIETIES**

BY

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**A PROJECT PRESENTED TO THE POSTGRADUATE
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THE AWARD OF THE DEGREE OF MASTER OF
BUSINESS ADMINISTRATION (MBA).**

!

SEPTEMBER, 1999

DECLARATION

I hereby declare that this project was written by me under the good supervision and unique guidance of Mr. A.J.C. Onu who took all the pains to peruse through my work and effect all the necessary corrections. That before now, no other similar work had been done or was carried out as at the time this research was conducted. All the information and data collated for this project that is not original had been duely acknowledge in my bibliography.



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CERTIFICATION

This project entitled **MARKETING OF FERTILIZERS IN KADUNA NORTH LOCAL GOVERNMENT AREA, THE ROLE OF FARMERS' CO-OPERATIVE SOCIETIES** by **JAMES RUNI** meets the requirements governing the award of the degree of Masters of Business Administration of Ahmadu Bello University and it is approved for its contribution to knowledge,



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DATE

DEDICATION

This research work is dedicated to the RUNIS'.

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ABSTRACT

Fertilizers are very important farm inputs. They are absolutely necessary for bringing about the expected change and transformation that is required for Nigeria's Agricultural Growth and Development.

Despite the growing domestic demand for Fertilizers, the supply has continued to decline over the years coupled with a corresponding increase in the price of the commodity. The increase in the price of the commodity in recent times have exceeded 8000%. Fertilizers are the life wire of almost every kind of crop production activity, especially in the; Sahel, Sudan and Guinea Savannah of Nigeria.

According to A.T. Mosher, It is one of the vital amenities that are required to transform the Agrarian sector of any economy. It is imminent that a peasant Nigerian farmer who is the major producer of the bulk of the food that is consumed by the entire Nigerian populace can not afford to purchase fertilizers because of the sky rocketting annual increase in the price of the commodity.

The main focus of this study was on the marketing and distribution problems at a micro level. To be more specific, at the Kaduna North local Government Area, with a special emphasis on the role of the farmers' cooperative society.

A total of (50) farmers' co-operative societies were randomly selected from the (89) farmers' co-operative societies within the local government Area. Detailed structured questionnaires with open and closed ended questions were administered to the individual farmers and some selected members of staff of the Local Government department. The Central measure of Location tendency and percentages were used to analyse all the information gathered and the collated data.

Mean, Median, Mode, Percentages and time series analysis were utilized in the collation and interpretation of the data collected.

1) Mathematical Dictionary

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2) Building Construction Handbook

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3) The New Architecture ATLAS

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Policy makers have initiated, planned and implemented many different Agricultural Programmes in Nigerian through the incorporation of diverse effective and efficient tactics and strategies in order to achieve both their short and long term objectives.

One of the such ideas particularly in the last decade (1989-1999) is the marketing of Fertilizers through the farmers' co-operative societies.¹ The area of Agricultural marketing is rather the most important area where co-operative role is very remarkable. The most striking issue now is the unprecedented rise in the price of food and Agricultural raw materials. Inorganic Fertilizers are no doubt becoming more scarce and expensive. The concern of the generality of the Nigerian farmers today is how to tackled the escalating fertilizer cost that is affecting the Agricultural sub-sector. There is inconsistencies in terms of the quantities of fertilizers that are distributed to the different co-operative societies or even to the peasant farmers. The times and prices at which these societies procure the inputs varies. While large scale farmers have relatively easy access to the farm

¹ E. M. Tuga, Financing Nigerian Agriculture: The Role of Co-operatives; Journal of Nigerian Agricultural and Cooperative Bank, Vol.1, No.1, (1990), P.40

inputs including credits, peasant farmers had to do with what they can provide on their own.

Top government functionaries who are assigned the task of the efficient and effective procurement, marketing and distribution of fertilizers hoard these inputs and cause artificial scarcity. Others divert the fertilizers to different channels other than the normal channel for their selfish interest, while on the other hand some do smuggle the fertilizers out of the country. The real marketing and distribution of fertilizers was not fully implemented by the co-operative societies (farmers) in Kaduna State, until 1985.

At that time, the farmers co-operative societies through the apex society requested for (1000) one thousand metric tonnes of fertilizers but only (500) five hundred tonnes were procured through the efforts of the Nigerian Agricultural Co-operative Marketing Organization (NACMO).

This request was made in march and it was granted in June. The farmers' co-operative societies have been fighting for a particular tonnage of fertilizers to be allocated to them by both the Federal and State Government for the first half of the last decade but the request had been turned down until recently when Governor Lawal Ja'faru Isa and his predecessors viewed co-operative societies as a viable tool for the successful marketing and distribution of fertilizers and other farm inputs in the state. In most cases, farmers had to go to the open market to

purchase fertilizers. There is relatively little or no encouragement from the state government and most co-operative society members (farmers) lack funds to compete with the middlemen in the marketing and distribution of fertilizers.

This study is however restricted to Kaduna State and Kaduna North Local Government in particular. It will study the different kinds of farmers' co-operative societies in Kaduna North Local Government Area and the different corresponding problems they encounter in the marketing and distribution of fertilizers.

1.2 STATEMENT OF THE PROBLEM

The Nigerian government has invested a lot of money at both the Federal Superphosphate Fertilizer Company (FSFC) Kaduna and at the National Fertilizer Company of Nigeria (NAFCON) at Onne, Port Harcourt in order to meet the ever increasing demand of fertilizer by the Nigerian Agricultural sub sector. A large amount of foreign exchange is annually being utilised to import fertilizers from other parts of the world like America, Germany and Australia in order to supplement for the estimated fertilizer demand of about (3m) three million metric tonnes.

With all these capital expenditures, farmers have limited quantities of fertilizers to buy at a very high price and they encounter difficulties in

- c. What are the tactics/strategies that the top government functionaries/middlemen are utilizing to obtain sustainable competitive advantage (SCA) over the farmers?
- d. What are the types of problems especially the transportation problems that the farmers encounter in the marketing and distribution of fertilizers.

1.3 HYPOTHESES

This study will be carried out under the premise of the following hypotheses:

- a. The farmers co-operative societies have relatively little or inadequate quantities of fertilizers to procure at the local government (<35 bags/farmer)

NULL-HYPOTHESIS

The farmers co-operative societies have relatively adequate quantities of fertilizers to procure at the local government (35 bags/farmer).

- b. The price differential experienced by the farmers' cooperative societies is artificial (caused by hoarding, smuggling and diversion) rather than real (caused by the forces of demand and supply).

NULL-HYPOTHESIS

The price differential experienced by the farmer's cooperative societies is real rather than artificial.

- c. The removal of subsidy on fertilizers could be responsible for the shortage of supply of the commodity.

NULL-HYPOTHESIS

The removal of subsidy on fertilizers could not be responsible for the shortage of supply of the commodity.

1.4 OBJECTIVES OF THE STUDY

- a. To determine the quantities of fertilizers that was allocated by the government to the farmers' co-operative societies through the Local Government Council.
- b. To estimate price differential or fluctuation on the prices at which the farmers co-operatives procured fertilizers at the local government council and at the open market.
- c. To find out the inconsistencies in terms of the problems/difficulties that were encountered by the farmers cooperative societies in meeting their desired transportation utility.
- d. To critically analyse and examine the gimmicks of the middlemen and top government functionaries in the fertilizer marketing system.

1.5 JUSTIFICATION OF THE STUDY

This study is imperative at this time because of the rapid or exponential increase in the prices of fertilizer and other farm inputs which has now exceeded eight thousand percent (8000%).

Farmers received limited quantities of fertilizers annually despite the government's capital investment in the Federal Superphosphate Fertilizer Company (FSFC) at Kaduna and the National Fertilizer Company of Nigeria (NAFCON), Onne, Porthacourt, Rivers State.

When these limited quantities of fertilizers are available, they are often diverted to undesigned channels. The corresponding increase in the cost of transporting fertilizers has resulted in the non-application of fertilizers by some farmers on their farmlands.

There are different types of co-operative organisations which are employed to achieve both economic and social goals. This study will help in elucidating the loopholes associated with the marketing and distribution of fertilizers as farmers cooperative organisations are concerned in Kaduna North Local Government Area.

1.6 THE SCOPE OF THE STUDY

For a good evaluation studies on marketing fertilizers in Kaduna North Local Government area, the role of the farmers co-operative societies,

the study should include a wide coverage of the different farmers co-operative societies found within the Local Government Area as well as the analysis of their changes over time.

This study was focused on a segment of the state (Kaduna North Local Government Area) for the practical reasons of the local government being a melting point and also for the relative ease of access to adequate information about the marketing and distribution of fertilizers.

This study cannot be considered as a comprehensive analysis of the marketing system because the analysis is subject to statistical significance, and the extent to which the research findings can be generalised is limiting.

1.7 PLAN OF THE STUDY

This study is divided into five chapters.

Chapter one introduces some vital aspects of the study. It states the background, problem, hypotheses, objectives, justification, scope, plan and definition of terms of the study.

Chapter two contains the review of literature. The review of literature will cover the concepts, characteristics and strategies for marketing Agricultural inputs (fertilizers). This chapter will also make a comprehensive analysis on farmers cooperative societies and agricultural marketing, especially with respect to the marketing of fertilizers.

Chapter three contains the research methodology that was adopted. It also contains the information about the research design, the sources of data, the methods of data collection, the population and sample size and also the information on data analysis techniques.

Chapter four portrays the analysis and interpretation of the data collated. It is the core of this study since it reports the research finding based on the questionnaires administered.

The summary of the research findings as well as the conclusions and then the recommendations are contained in chapter five.

1.8 DEFINITION OF TERMS

i. FERTILIZERS

Fertilizers are defined² as chemically synthesized plant nutrient compounds which may be added to the soil to supplement its natural fertility. They many contain one, two or more nutrient element.

ii. SINGLE/SIMPLE/STRAIGHT FERTILIZERS

These are fertilizers³ that contains only one nutrient element e.g. Ammonium sulphate $(\text{NH}_4)_2 \text{SO}_4$, Urea and superphosphate, etc.

² A. Faniran & O. Areola "Essentials of Soil Study with Special Reference to Tropical Areas: Heineman (1978), P.40-46.

³ Ibid, p.41

iii INCOMPLETE FERTILIZERS

These are fertilizers⁴ that contains two nutrients elements e.g.

Ammonium phosphate.

iv COMPLETE FERTILIZERS

These are fertilizers⁵ that contains three or more nutrient elements e.g. N.P.K. (15:15:15) compound fertilizers. Fertilizers can also be

(a) Nitrogenous

(b) Phosphatic

(c) Potassic

(a) NITROGENOUS FERTILIZERS

Are fertilizers⁶ that contains about 40-46% Nitrogen (N) e.g.

i.	Urea ($\text{Co}(\text{NH}_2)_2$)	45-46% N
ii	Ammonium Phosphate ($\text{NH}_4)_2 \text{HPO}_4$)	11-21% N
iii	Calcium Ammonium Nitrate ($\text{NH}_4(\text{NO}_3)_2 \text{CaCO}_3$)	25-26% N
iv	Ammonium Nitrate (NH_4NO_3)	33% N

(b) PHOSPHATIC FERTILIZERS

These are fertilizers⁷ that contains about 18-54% phosphoric acid or phosphoric oxide (P_2O_5), e.g.

⁴ Ibid P.42

⁵ Ibid p.43.

⁶ Ibid, P.44.

⁷ Ibid, p.45

- i Single superphosphate (SSP) 18% (P_2O_5), 18.21% Calcium (Ca), 12% Sulphur(s)
- ii Tripple superphosphate (TSP) 45-50% (P_2O_5)
- iii Ammonium Phosphate 50-54 (P_2O_5).

(c) POTASSIC FERTILIZERS

These are fertilizers⁸ that contains a high amount of Potassium(K). They can be found as sulphates of potash or as murate of potash, e.g.

- i Potassium Sulphate 75-80% (K_2SO_4), 33-50%(K), 53%(K_2O) & 18% (S)
- ii Murate of Potash 60%(K_2O), 42%(K)

⁸ Ibid, p.46.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Co-operative marketing is a system by which a group of producers come together for the purpose of performing some or all of the marketing services of: assembling, transporting, storing, grading, processing, wholesaling, retailing, financing and risk bearing. They hope to improve marketing efficiency by simplifying and cheapening the process of getting goods through the market and thereby secure for themselves a large share of the price paid by the final consumer.

2.2 THE CONCEPT

MaC Carthy¹ defines marketing "as the performance of business activities that directs the flow of goods and services from producers to consumers or users in order to satisfy customers and accomplish the firms objectives.

²Marketing is defined as a "matching process based on goals and capabilities by which a producer provides a marketing mix (product, services, advertising, distribution, pricing, promotion etc) that meets consumers need within the limit of the society.

¹ MacCarthy, E. J., Basic Marketing: A Managerial Approach, Richard D. Irwing Inc. Revised Edition, (1964), P.16.

² Larry Rosenberg: Marketing, Prentice Hall Englewood Cliffs, N.J. (1977), P.402.

³Marketing is a social and managerial process by which individuals and groups obtain what they need and want through creating, offering and exchanging products of value with others. ⁴Agricultural marketing can be defined from both the micro and macro view points.

The Micro view point is concerned with the individual participants in marketing be it the farmer or the business firm. From this perspective Agricultural marketing is defined as the performance of all business activities which direct the forward flow of goods and services to consumers in order to accomplish the producers objectives.

The Macro view examines marketing to encompass the total system of economic activities concerned with the flow of Agricultural products from producers to final consumer, the kinds of institutions and the price making mechanisms that guides those flows, the interactions among consumers, agribusiness firms, farmers and even governments that determine the levels of expenditures as income to market participants. Hence Agricultural marketing involves all those legal physical and economic services which are necessary to make products from the farm available to

³ Philip Kotler, Marketing Management, Analysis, planning, implementation and control 9th Edition Prentice Hall Inc. Upper River saddle, New Jersey, (1997) P.1-20

⁴ J. O. Olukosi and S. U. Isitor, Introduction to Agricultural Marketing and Prices: Principles and Applications, Living Books Series, G.U. Publications, Abuja, FCT, (1990), P.1.

the consumers.

- a. In the form and amount desired by the consumer.
- b. At the place desired by the consumers.
- c. At the time desired by the consumers.
- d. At the price consumers and middlemen are willing to pay and take possession.

Co-operative marketing is part and parcel of Agricultural marketing.

A cooperative is defined as a business organisation voluntarily owned by them on a non-profit basis. The International Labour Organization (ILO) defines co-operatives as an association of persons who have voluntarily joined together to achieve a common end through the formation of a democratically controlled organization making equitable contributions to the capital required and accepting a fair share of the risk and benefits of the undertakings in which the members actively participate. ⁵Co-operative is a legal practical means by which a group of self-selected and self-fish capitalist seek to improve their individual economic position in a society. If one adds certain organization features like; open membership, internal membership, democracy and distribution of surplus according to the turnover, limited returns on capital, political neutrality, cash trading (no

⁵ H.E. Bacock, "Cooperatives - The Pacesetters in Agriculture" Journal of Farm Economics (1935) Vol. 17, P.153-156.

credit), goods handled at market price, education for continuous expansion or constant education of members, the basic aspects are covered.

Modern co-operative movement began in England in 1844 by 28 poverty stricken weavers in a place called Rochdale. Co-operative was born out of human suffering degradation and human exploitation.

The principles of co-operatives are usually associated with the Rochdale pioneers who are the founding fathers of modern co-operative societies. ⁶Beal demonstrated that farmers' attitude and belief about co-operation include their reason for joining, where better production of participation is the objective characteristics of the members. ⁷Brown and Bealer found out that members whose approach to co-operation was most in agreement with the stated goals of the organization were the most effective members in terms of participation. ⁸Knapp visualized the benefit of Agricultural Co-operative as having a wider impact. He advanced co-operation as a means of increasing farmers' income and thereby improving the general prosperity of rural communities in a way of helping to preserve

⁶ G.M. Beal "The Roots of Participation in Farmers Co-operatives" Ames, Iowa College Book Store (1954), P.160.

⁷ E. J. Brown and R.C. Bealer "Value Orientations and Behaviours/Correlate of Members in Purchasing Co-operatives", Journal of Rural Sociology (1957), Vol.24, P.168-180.

⁸ J. G. Knapp, "An Analysis of Agricultural Co-operative Association", Journal of Farm Economics (1935), Vol. 17, Pg.190-198.

the economic independence of producers and regulating competition in the Agricultural community for the benefit of all farmers.

Co-operative may seem to have flourished in Agriculture by combining the economics of production on a large scale with many of the joys and social gains of small properties. Taking still a more ideological stand point co-operation might be viewed as a first step towards some ultimate goal such as socializing Agriculture or fostering a greater sense of community among farm people. Cooperative activities requires the habit of natural trust and confidence and unfortunately the bravest and the oldest and also the most trustful of the countrymen have always moved to the towns and the Agriculturist are a suspicious race. ⁹From Guatamalla Kuile and other write on a wheat growers co-operative whose activities included farm equipment servicing and the central purchasing and distribution on credit farms of two major production inputs, improved seeds and fertilizers. ¹⁰The need for concerted efforts in inputs distribution cannot be overemphasized. Reports on the availability of fertilizer for example when farmers require them are not usual. What a government body like a co-

⁹ C. H. Kuile, S. Manager-Catz and E. Agmrie, A Wheat Growers Co-operative in Guatamala in Bunting (Ed) Changes in Agriculture, Gerarld Duck Worth and Co. Ltd. (1970), P.1-10.

¹⁰ N.B. Mijindadi, Some Aspect of Fertilizer Use on Major Crops in the Northern States of Nigeria. A Paper Presented at the FAO/NORAD/FDA, Nigeria Seminar on Fertilizer Use Development, IITA, Ibadan, April, 1974.

operative department can do in this situation could be to incorporate servicing in its responsibilities and participate in the distribution of required inputs in rural areas where and through which its staff travel in the normal performance of their duties. Where this is already being done, a further concentration of efforts could still be beneficial. But whatever the definition, Agricultural Co-operatives have a practice proved of Economic benefit to farmers both in industrialized and developing countries. They are especially important as the cost price squeeze affect producers the world over and even as the farmers share of what the producers pay is constantly decreasing. Co-operative offers the opportunities for producers to share in the profit resulting from the value added to raw materials through processing, packaging and wholesale marketing. There are different types of co-operative organizations employed to achieve both social and economic goals. Therefore the societies are found in any areas of human activities implying that the types vary according to their activities. The marketing co-operatives perform the physical operation of marketing services to their members at cost and getting the highest price for their products. The industrial co-operatives deals mainly with manufacturing or processing of materials, agricultural or otherwise. The service co-operative purely renders services to their members and members of the public. There are (3) three classes of such services, one of these is the marketing co-

operatives. The society engages in the marketing of Agricultural Crops, consumers durable goods etc. The (2nd) is the financing co-operatives. There are several co-operatives that are engaged in the financial economy like Merchant Banks, Agricultural Development Projects(ADP), Rural Basin Development Authority (RBDA), Commercial Banks (First Bank) etc. Thirdly, there is the insurance co-operatives like the insurance company i.e. the Nigerian Agricultural Insurance Company (NAIC). The consumer co-operatives mainly provides consumers goods at wholesale prices or at reasonable prices e.g. Tomato, Soap, Oil etc. Multipurpose co-operatives combine many functions in one and engages in virtually all aspects of production, marketing and distribution. This form of co-operative has the advantage of integrating all aspects of activities under the same umbrella while bringing in members with diverse interest and background.

Cooperative would enable farmers to enlarge the sale of their operations and specialise more. Co-operative marketing will help farmers to turn out more uniform description of produce in bigger lots and to improve their realization of price through the sorting and bulking of produce, preparing it for sale and finding the best channel and methods of disposal. Besides economy of scale in the production and marketing process, theoretical advantages of cooperative marketing would include increasing producers sensitivity to market requirements and securing for

them a greater share of the marketing margin, popularly supposed to be increasingly large.

2.3 CHARACTERISTICS OF AGRICULTURAL PRODUCTS

There are certain inherent characteristics of farm products which makes special demand on marketing systems and organizations. These are:

1. **BULKINESS:** Farm products are usually bulky. Their weights and volumes are great in relation to their monetary value, especially when compared with many manufactured goods. As a result, transport and storage cost for such products tends to be high in relation to their value.
2. **SEASONALITY:** The seasonal nature of farm products imposes constraints on the marketing system. At harvest time, there is heavy demand for marketing facilities such as storage and transportation. At other times of the year, these facilities are hardly used at all. This situation is made worse by the small size of the average production unit. Over the greater part of Africa and Asia for instance, the average size of a holding is not more than two hectares, so many farm products start their journey to the markets as the surpluses of many thousand separate farms.

3. PERISHABILITY: Some crops retain their quality for a long time but most farm products are perishable. Fruits and vegetables rapidly become over-ripe and begin to decay if they are not consumed or kept in special storage. Milk is especially perishable in hot climates and without special treatment, it may keep for only a few hours. Rice and other farm products retain their quality for a very long time i.e. they are durable.

2.4 STRATEGIES FOR MARKETING AGRICULTURAL PRODUCTS

The term strategy was derived from the GREEK word STRATEGOS; meaning general.

In a military sense it means the planning and directing of battles or campaigns. Sun-Tzu, A Chinese military strategists said this about strategy. "All men can see the tactics whereby I conquer but what non can see is the strategy out of which great victory is evolved."

In the business sense, however, a strategy is an action by management to offset actual or potential actions of competitors. ¹¹A strategy is a term used to describe how objectives are achieved. ¹²It is a unified, comprehensive and integrated plan relating the strategic advantages of the

¹¹ O. Hudson "Strategic Business Management, the Way Foward, Davidson and Fred Co. Ltd. Essene Nigeria (1998) P.1.

¹²Ibid.....,P1

environment. It is designed to make sure that the basic objectives of the enterprise are achieved.

¹³David A. Aaker said that a strategy is shaped or defined by six elements or dimension. These elements are:

- (a) The product market in which the business is to compete.
- (b) The level of investment.
- (c) The functional area strategies needed to compete in the selected product market.
- (d) The strategic assets or skills that underlie the strategy providing the sustainable competitive advantage.
- (e) The allocation of resources over the business units.
- (f) The development of synergistic effects across the business.

Many firms have used variety of potential strategies to achieve sustainable competitive advantages (SCAs). However, Michael Porter has suggested two most useful strategies available to firms. These are DIFFERENTIATION AND LOW COST. Other strategic thrusts include FOCUS, pre-emptive move and synergy. In Nigeria, the traditional marketing system for food grains is similar in both the Northern and Southern parts of the country. The marketing system is characterized by many buyers and sellers. The sellers usually offer very small quantities for

¹³ Ibid....., P1

sale at a time. In every grain producing area, there are rural markets which are held periodically either once or twice a week. These rural markets could either be isolated or non-isolated. Grains are bought from the farmers by the rural buyers who participate actively in assembling the grains. The farmers usually carry the grains to the market in bags while the mode of transportation is usually by head potterage, bicycles, donkeys or by motor vehicles.

In the rural market prices which are determined through the process of higgling and haggling may remain the ruling market price on that market day. However, other factors such as familiarity between the seller and the buyer, the time of the day the transaction was made and the language spoken by the buyer could influence the actual price which the buyer receives. The units of the measure is not standard. It varies from one part of the country to another. In one part of the country, grains are sold in basins, tins or bags whereas, in another part of the country, they are sold in Mudus, Tiya or bags. Even where bags are used in all the markets, the sizes vary from one market to another, where metal bowls called Tiya and Mudu are used, the actual capacities of these units of measure usually vary from one seller to another. It is for this reason that the Local Government Authorities introduced standard Mudu and Tiya measures which all traders must use from the isolated rural market, the closest market to the farm gate.

The grains are assembled in big lots and moved by motor vehicles to bigger rural non-isolated markets which are held periodically, say once or twice a week. In the non-isolated rural market, wholesalers and their commissioned agents buy from the rural buyers. Some farmers also bring their grains indirectly to these markets. Grains are assembled here in bigger lots and are bagged. From these markets the grains are transported in motor vehicles to urban regional markets e.g. the Kaduna Central market is a good example of an urban regional market. The urban regional market holds daily. In such markets the interstate wholesalers buy in large quantities and transport them by road or rail to the non-regional Urban market in Lagos, Dugbe market in Ibadan and markets in distant places like Benin city, Porthacourt etc. Agribusiness firms and other processors do have their commission agents buying for them in the rural non-isolated markets. From such markets the grains are carried to the warehouses of the firms, this is the case for the feed millers. The feedmillers, breweries and other Agribusiness firms also have contract grain growers. They enter into agreements with such farmers before the commencement of the production season. They agree on what price to pay for the produce before the farmer produce such crops or rather before the commencement of the production season. The storage of these grains takes place at various levels in the marketing system. At the farmer's level, storage of grains is carried out to

take advantage of future rise in price. The farmers store their grains in their houses, such as in a grainary or rumbu. The wholesalers store their grains for sometime in, granaries warehouses and silos. The agribusiness firms and processors have modern warehouses for the storage of grains.

¹⁴In Nigeria storage facilities are generally not adequate and many studies have reported post harvest losses of between 20 and 30 percent due to poor storage facilities. As a result of the poor storage facilities, grain prices fluctuates a lot from one production season to another or from one harvest season to another.

Most livestock in Nigeria are kept under the free range management system. Just as in the case of food crops, the farmers bring all other farm animals like sheep, goat and chicken except pig and cattle to the same market where food crops are sold. Local chickens are sold directly to the consumers or local assemblers who will later sell them to the consumers. Modern poultry producers can sell their birds (broilers and culled layers) directly to consumers at the farm gate price. Local assemblers also buy broilers from different poultry farmers and sell them, consumers also buy broilers from different poultry farmers and sell them to restaurants and in the open markets. The local assemblers sometimes carry the birds to the

¹⁴ M.B.Mijindadi "Cooperative Growth for Agricultural Development" Papers delivered at a workshop for Co-operative officials at Bagauda lake Hotel Kano Organised by NAERLS, A.B.U. (21-26 Nov, 1974) P.41-50.

urban regional markets where they are sold to the retailers in the market. Supermarkets get their supply of broilers and culled layers directly from the poultry farms. The birds are dressed and stored in deep freezers until consumers exhaust them. The sheep and goat farmers transport their animals into the rural markets mainly on hoofs or by motor vehicles. Most of the animals are carried to the non-isolated rural markets like the Giwa market. A farmer usually brings between one and three animals to the market at a time. In the market, commission middlemen take over the business of selling the animals from the farmers. They usually have a particular spot in the market ground where all the animals are congregated. Potential buyers can make their collection from the assorted animals, both by visual inspection and feel. At the end of the transaction, the buyer pays the agreed price and in addition pays a fee called, LADA which is the commission for the selling agent. Sometimes local assemblers come to the rural markets, to assemble farm animals. They buy from the farmers and the middle men and then transport the animals in lorries and trailers, to sheep and goat retail markets in the urban cities. Butchers in the urban towns usually buy sheep and goats from the urban retail markets on a daily basis. The animals purchased are either slaughtered there or carried to the public abattoir. Cattle usually have their separate market places. These are found in many urban centers such as Zango, Zaria, Kaduna, Ibadan, Gusau

to mention a few. Government legislation mandates butchers to slaughter cattle in the abattoirs, where the meat is inspected before it is transported to supermarkets, meat shops, cold rooms and meat stalls in the urban market places. Cattle market hold once weekly in some centers on a particular day of the week. whoever is financially capable and interested could join the cattle traders business and buy as many animals as he/she could afford, on any market day. Most of the butchers and merchants are not recognized to be registered officially, so they operate without license. Transportation of cattle to and from the market is either on hoofs or in haulage trucks and opened-up commercial vehicles. Transportation fares vary according to the distance, road condition and also the number and size of the animal(s) etc.

Cotton is a non-food cash crop which has a different marketing system from that of food crops. The structure of the cotton market is that of a regulated monopsony under the Nigerian cotton board up to 1986 when all the commodity are abolished by the Federal Government of Nigeria (FGN). Cotton market now operates under the free market forces thus assuming the structure of a pure competition.

Agricultural products are supplied by many producers, who turn them over to marketing intermediaries that provide assembling, grading, storage, transportation and selling services. Their commodity character results in

relatively little advertising and promotional activity, with some exceptions. From time to time, commodity groups will launch campaigns to promote the consumption of their products and some producers brand their products. Agricultural products usually have great bulk and low unit value and require substantial transportation to move them from producer to user. Agricultural products have fewer and larger producers who often market them directly to industrial user, because the users depend on these materials, long-term supply contracts are common. The homogeneity of natural materials limits the amount of demand creation activity.

2.5 COOPERATIVE SOCIETIES AND AGRICULTURAL MARKETING

Co-operative marketing is a system by which a group of producers come together for the purpose of performing some or all of the marketing services of assembling, transportation, storing, grading, processing, wholesaling, retailing, financing and risk bearing.

The group of producers hope to improve marketing efficiency by simplifying and cheapening the process of getting goods through the market and thereby secure for themselves a larger share of the price paid by the final consumer. Co-operatives marketing offers the opportunity of economies of scale, the ability to find new outlets for producer or (to establish new outlets by owning processing facilities) and increased

bargaining power for producers. The establishment of a new marketing channel is likely to need initial government support while it tries to establish itself against the competition of existing middlemen. There are private systems marketing intermediaries that a co-operative marketing organization must compete with or replace. ¹⁵A definite statement about the success of marketing co-operatives in Northern Nigeria cannot be made because they are in the early stages of development. In many instances marketing co-operatives have failed either to reduce margin or to handle a significant volume of the small surpluses of small farmers. The main reason for this has been the inability to compete with the private organized system and handle the skilled trading functions, efficiently. This is partly due to difficulties normally experienced in a traditional Agricultural sector where risk and uncertainties are high, because of the numerous constraints provided by the poor infrastructure and poor market information system. These are however difficulties that the private system has learned to cope with and to a certain extent overcome.

2.6 THE MARKETING OF FERTILIZERS

The emphasis of co-operatives marketing in the North is practical wisdom, but it remains superficial as long as it stops short of co-operative

¹⁵ M. Hays "Agricultural Marketing in the Northern States, How can Co-operatives help"? A paper presented at a Workshop for Co-operative Officials at Bagauda Lake Hotel, Kano, NARELS, A.B.U., Zaria, 21-26, Nov. 1974.

supply and better farming methods.

In the economic theory, marketing is defined as that part of economics which is involved in the creation of time, place, form and possession utilities. The agencies involved in the marketing and distribution of fertilizers in Kaduna State includes processors and manufacturers like the Federal Superphosphate Fertilizer Company (FSFC) Kaduna, Agric. business firms like the Farmers Supply Company (FASCOM), Agric departments/Ministries and also the Agricultural Development Projects (ADPS). These agencies are experts in the field of fertilizer production, fertilizer marketing and fertilizer distribution. The (FSFC) at Kaduna had a capacity of producing 100,000 metric tones of single superphosphate (SSP) where phosphate rock will originally come from Togo. The National Fertilizer Company of Nigeria (NAFCON) at Onne can produce urea, compound fertilizer (NPK) or diammonium phosphate (DAP).

The minimum capacity recommended for this plant is 450,000 metric tones of urea annually. A total fertilizer storage capacity of 1.3 million tonnes was identified in the country, half in the secondary and other associated stores.

The supply and distribution functions are vertically integrated and three vertical structures/segments are involved, they are the Government, the private enterprise and the cooperatives. It was the responsibility of each

state government to arrange for the procurement and distribution of fertilizers within its territory. This is by awarding contracts to private contractors for the procurement and distribution of fertilizers to the state's main depots. The state will then distribute the fertilizers to their sub-depots located in the state. The depots in turn sell the fertilizers to commission agents who were expected to sell them to the farmers at government subsidized prices. In exceptional cases, fertilizers were also distributed through co-operatives and farmers council.

In 1975, a change was made. Fertilizer Procurement and distribution then became a monopoly of the (FGN) which undertook to distribute fertilizers to the states. The amount distributed to each state depends on their individual needs and the Federal stock each year. Hence Kaduna State, in line with other states of the Federation, abolished the retailing of fertilizers by private commission agents. The farmers now had to buy their fertilizers directly from the government or indirectly through the farmers council or co-operatives.

After the state receives its quota, it in turn fixes quotas for each local government area keeping in view the needs of the local government areas and the quantities of fertilizer available for that season. The fertilizers are transported to different local government areas. The local government areas arrange for the transportation of the fertilizers to their final destination with

the assistance given to them by the state government. Under this new system, the local government areas distributes fertilizers directly to the village heads who in turn sell them to individual farmers.

The kinds of fertilizers commonly marketed in the states include; compound fertilizer (15:15:15), Urea, Calcium Ammonium Nitrate (CAN), single superphosphate (SSP), Murate of potash and Tripple superphosphate etc. The prices at which fertilizers were sold to farmers between (1986) and (1988) ranges between ₦10 to ₦20 per (50kg) bag. It is often not easy for the farmers to purchase fertilizers at the government approved centers. This is because of the bureaucracy involved in the selling of the inputs to small scale farmer. Small scale farmers find it relatively easier to purchase fertilizers in the open market, at a price slightly higher than the government approved prices. Between (1988) and (1990), fertilizers were sold at a range of (₦20 to ₦40) per a (50kg) bag. There were some few exceptional cases where farmers were forced to buy the input at the rate of ₦55 to ₦60) per (50kg) bag. Currently a (50kg) bag of fertilizer cost price is between the range of (₦1,200 to ₦1,500).

The crux of the matter is that the personnel charged with the effective and efficient marketing and distribution of fertilizers divert them to undisclosed channels.

Some hoard the fertilizers in order to cause artificial scarcity, thereby inflating the price of the input. Some export the fertilizers to neighboring countries for a better offer of prices while others smuggle the input to the countryside and sell them at exorbitant prices to the farmers. The farmers have no other alternative choice than to buy the fertilizer at such exorbitant rates because they need it for a very effective and efficient crop production. On the long run, the actual farmers might end up not purchasing the inputs because of its relative scarcity and even when it is made available, the high price might be limiting.

Farmers then realized that they cannot stand the competition as individuals, hence they went a step further to form co-operative societies. Co-operative marketing in Kaduna Local Government started about fifteen (15 years) ago (1985/86). Lack of encouragement and support from the state government and also the lack of funds had limited or reduce the effectiveness of the co-operative societies especially at points where they can not really compete with the middlemen in the open market. To ensure the effective marketing and distribution of fertilizers, the government are utilising the different Agricultural Co-operative societies. The different co-operative members will tender their fertilizer request to the primary co-operative societies at the village level. These request will be collected from different villages to the co-operative union at the district level. The co-

operative union at the district level will gather all the request at the districts in the state and then tender it to the co-operative union at the local government level. At the local government level, request are gathered and tendered to the state government through the Ministry of Agriculture. The Federal Ministry now considers the nation's request in general and rationally allocate the fertilizers according to each state's demand in the nation. The Fertilizer Procurement and Distribution Department (FPDD) of the Federal Ministry of Agriculture now carries out the task of fertilizers allocation. They have six units scattered throughout the country. These departments are located at Sokoto (Gusau), Benue (Markurdi), Oyo (Ibadan), Rivers State (Porthacourt) and others. The (FPDD) gives the allocation through their depots located in a particular state or they might make allocation from Abuja - directly.

The Agric Cooperative societies which are the focal point of development at the district level have (2)two advantages over the former system of distribution in the sense that they are located at the grass root level and because they integrate all parts under a unified management, they also facilitate a package approach to the input distribution system by taking into account the complimentary relationship among inputs and therefore promote greater efficiency.

2.7 THE ROLE OF FARMERS' COOPERATIVE SOCIETIES IN FERTILIZER MARKETING

In most countries with a large farming population, government have actively encouraged co-operative farmers groups in order to promote social and economic changes considered desirable for their nations development.

Farmers co-operatives can be used by Government to introduce new inputs such as pesticides, new varieties of crops or mechanization to farmers. The existence of co-operatives enables distribution and instruction on utilization to reach more farmers than if the government works through individuals. The farmers' co-operatives societies make bulk purchases of fertilizers from the local government secretariat in order to take advantage of the lower prices of the farm inputs and also to avoid the profit of traders linking the Ministry of Agriculture and Natural Resources and the farmers. They also make improved farm inputs available to farmers who would otherwise not have access to them. These inputs especially fertilizers are sold to the farmers at cost. Prior to the sale of the fertilizers, a record on the fertilizer requirement of each farmer is kept at the local government secretariat. In some cases the farmers will be required to deposit some amount of money before the demanded quantity of fertilizers are supplied. As soon as the fertilizers are available at the local government secretariat, the leaders of the different farmers co-operative societies are supplied with

the fertilizers according to their demand. Although the quantity supplied will depend on the quantity of fertilizers that are at the disposal of the local government. At times a distribution formula must be incorporated into the allocation policy.

Farmers cooperative society can help by:

- i. Improving the farmers bargaining position.
- ii. Simplifying marketing stages and improving linkages.
- iii. Eliminating middlemen and decreasing marketing margins.
- iv. Providing improved facilities like transport, packing and storage facilities.
- v. Providing a stable market outlet for the farm inputs.

CHAPTER THREE

3.1 RESEARCH METHODOLOGY

This chapter will explain how this study will be carried out by making a vivid or explicit and unambiguous explanation of the research design, the sources of the data collected, the population and sample size, and also the techniques that will be used in analyzing the data.

3.2 RESEARCH DESIGN

This study is a survey kind of research. A survey research studies both large and small populations by selecting and studying samples chosen from the populations to discover the relative incidence, the distribution and interrelations of sociological and psychological variables. survey research focuses on people, the vital facts of people and their believes, opinions, attitudes and behavior.

The longitudinal survey design will be used, especially the TREND and the COHORT methods of the survey design. The prices at which farmers procured fertilizers for the last decade will be examined with the notion of the price differentials that the farmers experience i.e. their margin.

There are so many different types of co-operative societies in Kaduna north Local Government area. But this study will be restricted to a narrower (specific) portion of the co-operative society. There are a sum total of (89) eighty-nine farmers' cooperative societies in Kaduna North Local Government Area. These co-operative societies will be examined, properly studied and critically analyzed in order to have a comprehensive knowledge

of the problems of the study with the notion of finding an immediate if not a lasting solution to the impending menace.

3.3 SOURCES OF DATA

Kaduna State is located in the Northern part of Nigeria. It stretches from latitude $9^{\circ}N$ to latitude $13^{\circ} 15'N$ or approximately 460km from South to North.¹ Kaduna Local Government is located within these latitudes too.

Two types of data were used in this study. These are:

3.3.1 PRIMARY DATA

Data may be expressly collected for a specific purpose. Such data are known as primary data. The main advantage of obtaining such data is that the exact information wanted is obtained.² The primary data were obtained from the farmers belonging to the different farmers' cooperative societies located within Kaduna North Local Government area and also from some selected members of staff of the Local Government, especially those of them that are within the Department of Agriculture. The farmers cooperative society comprises of mostly peasants, alternatively small scale farmers, scattered throughout Kaduna township. These societies are found at Unguwan Dosa, Unguwan Rimi, Mando, tudun Wada, Malali Low Cost/Village etc. To be precise information were gathered from about (10) different settlements within the Local Government Area.

¹ G. O. I. Abalu, An Agricultural Survey of Kaduna State: A.B. U., Press (1979), P.348.

² E. C. Osuala, Introduction to Research Methodology, African-Fep. Publishers (1987), P.118.

3.3.2 SECONDARY DATA

Occasional, data collected for some other purposes, frequently for administrative reasons may be used. Such data are known as secondary data.³ Secondary data must be used with caution. Such data may not give the exact kind of information needed and the data may not be in the most suitable form. Great attention must be paid to the precise coverage of all information in the form of secondary data. The secondary data were obtained from Kaduna State Ministry of Agriculture, the records from the Agric department of Kaduna North Local Government, Magazines and Journals etc which were duly acknowledged.

The farmers cooperative societies are unique in their demand for fertilizers. In organic fertilizers tends to form the life wire of these societies.

3.4 METHODS OF DATA COLLECTION

The data for this study were collected through the administration of two different sets of questionnaires with open and closed ended questions for both the farmers' cooperative society members and members of staff of the Kaduna north Local Government Area. The questions framed for both clients were aimed at elucidating or revealing some of the needed answers and possible solutions or rather suggestions to the inconsistencies and problems that were associated with the marketing and distribution of

³ Ibid, P.118.

fertilizer. An information on the quantities, prices and times at which fertilizers were purchased by the farmers cooperative societies for the last decade were gathered from the local government secretariat too.

3.5 POPULATION AND SAMPLE SIZE

There are different types of Farmers Co-operative Societies in Kaduna North Local Government which were employed to achieve both social and economic goals. There are (89) eighty-nine farmers' Co-operative societies in Kaduna North Local Government Area. Some of the farmers cooperative societies are multipurpose while others are not, they include Tobacco, Tomatoes, fish, poultry and other types of livestock cooperative societies.

In summary, this study has an estimated population sample of about (2,700) two thousand seven hundred farmers.

The sample size of this study is (50%) fifty percent of the estimated sample population. This is a cohort or rather a fair representation of the sample population. To be precise, this study has a sample size of (1350) one thousand three hundred and fifty farmers. In this study, purposive random sampling technique was employed. hence farmers cooperative societies which were formed within the last three years were not incorporated into the study. The selected farmers cooperative societies were selected based on the number of farmers in a given society i.e (25) twenty-five. This means that the society should not have less than (25) twenty members before it can be incorporated into the studies. The distance of the

co-operative society from the local government secretariat is another factor that determines its selection for this study. The average distance is (10km) ten kilometers.

3.6 DATA ANALYSIS TECHNIQUES

The analytical tools that were used for this study were the measures of central tendency and percentages.

Mean, median mode and percentages were used to analyze all the data and information obtained. The percentage difference in the price received by the producers and that paid by the consumers were calculated for the years under review.

This simply means that the marketing margins were computed in order to be able to estimate the farmer's share of the consumer's naira. Time series analysis is another statistical tool that was utilized in this study in order to enhance the ability of the researcher to test his hypothesis.

CHAPTER FOUR

4.0 DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

This chapter contains the details of the findings of this study.

To further buttress the details of this findings, further emphasis on the test of hypothesis were made. The information gathered were collated and analyzed using the simple descriptive statistical tools with a subsequent discussion on the results in order to proffer a solution to the impending problem.

When we look at the recent history of Agriculture in Nigeria, it is apparent that exports prior to the discovery of oil were dominated by Agricultural products produced by millions of small scale farmers. ¹Small scale farmers farming about 0.01-5.99 has constitute 80.78% of all farm holdings. The seasonal variation on rainfall means that Agricultural activity has a peak period in June and July and also a period of relatively low activity during the dry season, when low lying lands (inundated lands) are used for irrigation farming (Fadama farming).

¹ Ijere, M. O. New Perspetive in Financing Nigerian Agriculture. Fourth Dimension Publishers (1986), P.124.

4.2 DATA PRESENTATION

Table 4.1 CO-OPERATIVE ACTIVITIES

Co-operative Societies	CTLS	CCMS	F/COOP	CONS	TM/TB	L/STOCK	POULT	MP/COOP	IND	FISH
No. of farmers Co-operative societies in Kaduna North	89									
Agencies involved in the distribution of fertilizers	FASCOM, FSFC, NACMO KADP.									

Source: Field Survey

KEYS

CTLS	-	Cooperative Thrift and Loans Society
CCMS	-	Cooperative Credit and Marketing Society
F/Coop	-	Farmers Co-operative Society
CONS	-	Consumers Co-operative Society
TM/TB	-	Tomatoes & Tobacco Farmers Cooperative Society
L/Stock	-	Livestock Farmers Co-operative Society
Poult	-	Poultry Farmers Co-operative Society
Ind	-	Industrial Co-operative Society
Fish	-	Fish Farmers Co-operative Society
MP	-	Multipurpose Co-operative Society
FSFC	-	Federal Superphosphate Fertilizer Company
KADP	-	Kaduna Agricultural Development Project
FASCOM	-	Farmers Supply Company
NACM	-	Nigerian Agricultural Co-operative Marketing Organization

Co-operative movement has not yet established itself in Nigeria as an autonomous institutions completely independent of government. There are about (89) eighty-nine different types of farmers co-operative societies in Kaduna North Local Government area among others.

Table 4.1 shows these different types of co-operative societies. Each of these societies has a minimum of (25) twenty five members. Most of these societies started the marketing and distribution of fertilizers in 1984/1985. The year in which a society starts the marketing and distribution of fertilizers depends on its year of formation. The agencies that distribute fertilizers and other Agricultural inputs to these farmers are the farmers supply company, the Federal Superphosphate Fertilizer Company, the Kaduna Agricultural Development project and the Nigerian Agricultural Co-operative marketing organization.

Table 4.2 LAND DISTRIBUTION OF FARMERS

PARCEL OF LAND	NO.	%
1-3	363	33
4-6	577	52
7-9	165	15
TOTAL	1,105	100

Source: Field Survey

Table 4.2 shows the number of parcel of lands that each farmer possesses, irrespective of the land area.

²In the past, farmers have responded by increasing their areas cultivated and using more labour. This has simply been response based on using traditional technologies on the extensive margin. Land is described as the original and indestructible property of the earth. From the research conducted (52%) of the farmers possess 4-6 parcels of land, (33%) 1-3 parcels while (15%) possessed between 7-9 parcels of land. Most of these lands were not found within a particular locality; they were scattered around a locality or settlement and this can be attributed to the increasing rate of industrialization of Kaduna town. The lands can not be properly measured because they are relatively smaller in size and also fragmented.

These farmers use implements like hoe, cutlass and also the special plough called "Garma" in the clearing of the land and also in pulverizing the soil.

² K. Eicher, Research on Agricultural Development on Five English Speaking Countries in West Africa, New York, Agric Development Council (1970), P.10.

Table 4.3 CO-OPERATIVE SERVICES

	SERVICES	NO.	%
I	Credits	375	34
II	Improved Seeds	276	25
III	Tractorisation	198	18
IV	Pesticides	121	11
V	Herbicides	58	5
VI	Others	77	7
	TOTAL	1105	100

Source: Field Survey

The government through the co-operative department have been able to come up with some agricultural programmes that were aimed at improving the farmers productive ability.

Table 4.3 shows that (34%) of the farmers benefitted from co-operatives credits since their societies were formed. These credits usually have low interest charges and adequate time is given to the farmers to enable them pay back the loans with little pain. Others (25%) have benefitted by having access to improved seeds at a relatively low cost (₦250/50 kg bag). Over the years, (18%) have had their parcels of land ploughed, harrowed and ridged by the tractor hiring service. Only about (7%) of the farmers were able to buy fertilizers from the co-operative unit of the Local Government Area at government approved prices. Lastly, 11% and 5% were able to buy pesticides and herbicides respectively from the co-

operative department. Some of these included Galex, Furadn, Aldrex T, Cymbush 10EC, Primigram, Rogoprim, Fernessan D, etc.

The main problem here is that some of the farmers could not remember the cost at which the tractors worked on their farms, the quantities of both the pesticides and the herbicides used over the period under review.

TABLE 4.4 TYPES AND SOURCES OF FERTILIZERS

TYPES	SOURCE(S)	NO.	%
N.P.K., Urea	Open Market	540	40
Supa, DAP	Agric Department	351	26
C.A.N.	FASCOM	216	16
	Cooperative Society	162	12
	Others	81	06
TOTAL		1,350	100

Source: Field Survey

Table 4.4 shows the possible types and sources of fertilizers that were used and are still in use by the farmers.

They include; compound fertilizers (N.P.K. 15:15:15), Urea (Ammonium sulphate), Single superphosphate (SSP or Supa), Calcium Ammonium nitrate (C.A.N) and Di ammonium phosphate (D.A.P) etc depending on the variety of crop and the farming method employed. Fertilizers are applied for example at the spot, by broadcasting, by split application and by banding, etc.

The study revealed that 40% of the farmers procured their fertilizers from the open market (where buyers and sellers converge in order to agree on a price). Farmers usually go to the open market when fertilizers are not readily available at the Local Government Area Council. Even when these inputs are available, they are always in short supply. The bureaucratic steps involved coupled with the disgusting "favoritism" shown by members of staff of the council made the whole process cumbersome for the farmers. Regardless of all these some of the farmer (26%) did purchased their fertilizers from the Local Government Area Council because they were sold at a relatively reduced or rather subsidized rate.

Farmers who purchased fertilizers and other farm inputs from the farmers supply company (FASCOM), the co-operative societies and the black market (other sources) constituted 16%, 12% and 6% of the farmers respectively. The black market is created when some of the co-operative department staff members connived with farmers behind closed doors and exchanged or transferred ownership of the fertilizers and other farm inputs at a very high price.

Table 4.5 FERTILIZER CONSUMPTION (50KG BAG) BY THE KADUNA NORTH LOCAL GOVERNMENT

YEAR	FERTILIZERS		GOVT.(₦) PRICE
	QUANTITY DEMANDED	QUANTITY SUPPLIED	
1989	25,119	22,258	10
1990	31,574	28,500	10
1991	74,058	48,810	15
1992	98,627	53,009	30
1993	66,708	66,708	40
1994	70,123	54,364	100
1995	82,444	80,111	150
1996	92,345	60,354	200
1997	96,042	54,678	300
1998	98,146	45,785	700
1999	102,200	30,000	850
TOTALS	837,386	544,577	

Source: Field Survey

The functional approach or the pricing and exchange functions implies buying and selling which are the (2) two sides of the same transaction. It simply means an agreement of price, a transfer of title and ownership, provision of time and place of delivery and methods of payment.

The usefulness of the price tag depends on the honesty and integrity of the seller. Selling functions includes most of the physical arrangement or displaying the goods. It also includes advertisement and other promotional devices to influence or create demand.

Over the years the supply of fertilizers had always been less than the demand. Between 1989 and 1999, the total quantity of fertilizers that were requested amounted to 837,386 bags while the total quantities supplied were 544,577 bags. This shows the amount of fertilizer consumption within the last decade - in Kaduna North Local Government area. The price per a (50 kg) bag of fertilizer rose from (₦10) ten Naira per bag to (₦850) eight hundred and fifty Naira per bag. This shows that the price of a (50kg) bag of fertilizer had always been on the increase within the period under review.

The authenticity of the figures of the quantities of fertilizers demanded by the Local Government Authorities and also the cooperative societies vis-a-vis the quantities supplied by the government cannot be guaranteed for the fact that no true records of these inputs are kept.

Table 4.6 FERTILIZER PRICE FLUCTUATION

S/NO	YEAR	GOVT. PRICE	CHANGE IN PRICE	PERCENTAGE CHANGE IN PRICE(%)	MARKET PRICE	CHANGE IN MARKET PRICE	PERCENTAGE CHANGE IN MARKET PRICE
I	1989	10	00.00	00.00	15.00	00.00	00.00
II	1990	10	00.00	00.00	30.00	15.00	50.00
III	1991	15	05.00	33.33	40.00	10.00	25.00
IV	1992	30	15.00	50.00	100.00	60.00	60.00
V	1993	40	10.00	25.00	200.00	100.00	50.00
VI	1994	100	60.00	60.00	400.00	200.00	50.00
VII	1995	150	50.00	33.33	750.00	350.00	46.67
VIII	1996	200	50.00	25.00	1100.00	350.00	31.82
IX	1997	300	100.00	33.00	1200.00	100.00	8.33
X	1998	700	400.00	57.14	1350.00	150.00	11.11
XI	1999	850	150.00	17.65	1400.00	50	3.57

Source: Field Survey

Table 4.6 shows that there is a general rise in both the government approved prices and the market prices of fertilizers over the period under review, with the market prices of fertilizers rising above the government approved prices. The market prices of fertilizers is higher because the seller would have to consider his cost of transportation and loading from the point of initial production to the final point of consumption. We should also not forget to bear in mind that the primary motive of the seller is to make profit. The government prices of fertilizers were low because of the government subsidy on the commodity. The government to some extent is

not out to make profit per se but rather to boost food production by satisfying the needs of its farmers.

There was a general decrease in the percentage annual changes in the prices of fertilizers with the market price decreasing faster than the government approved prices although there are some few exceptional cases where these trends of decrease does not hold. The soaring increase in the prices of fertilizers and other farm inputs is pinching on the peasant farmers. Majority of these farmers are finding it difficult to purchase fertilizers for their farm production activities.

FIG 1: FERTILIZERS PRICE FLUCTUATION

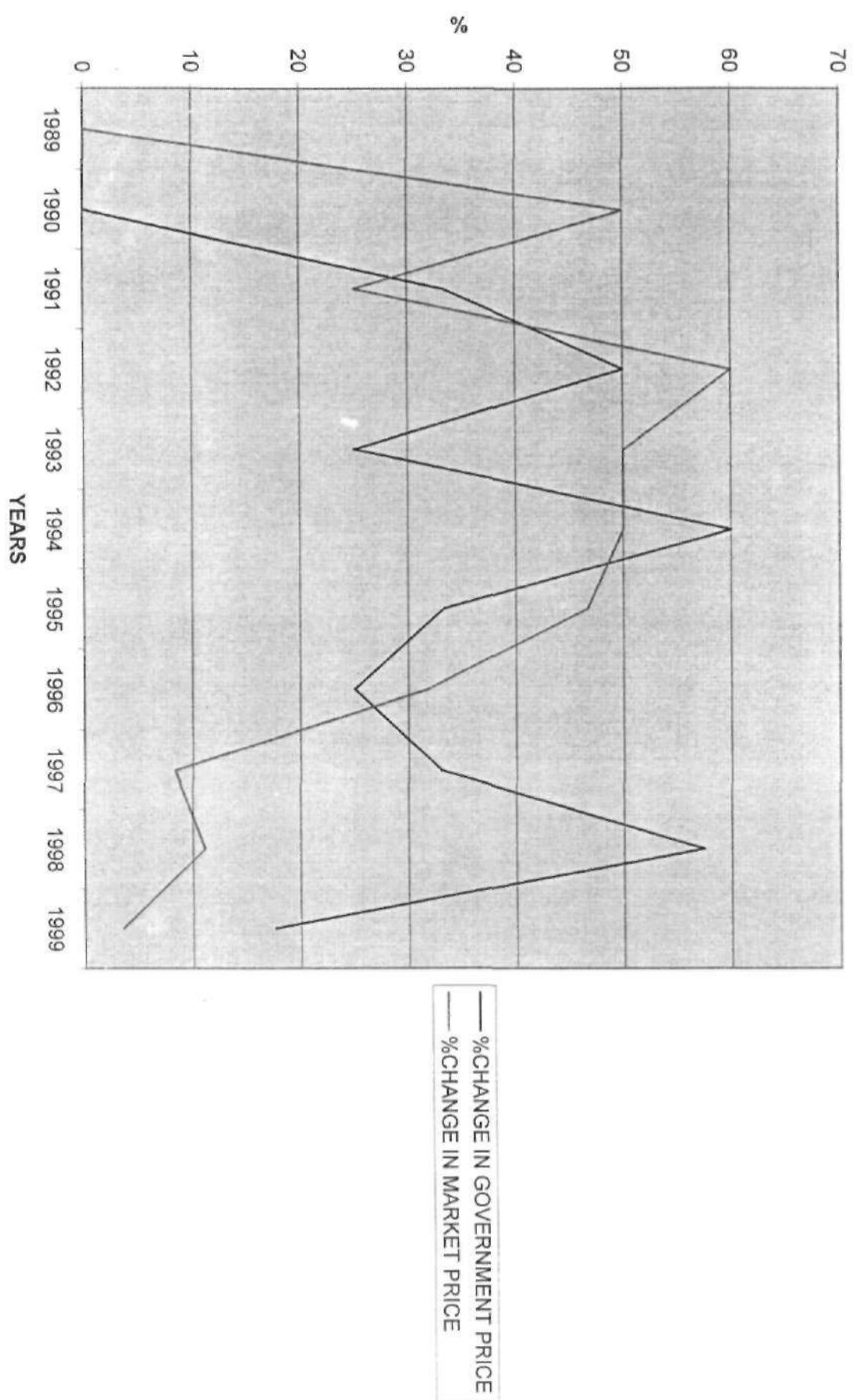


Table 4.7 MARKETING MARGIN OF FERTILIZERS

S/NO	YEAR	PRICE (₦)		MARKETING MARKING (%)
		BUYING	SELLING	
I	1989	10	15	33.33
II	1990	10	30	66.67
III	1991	15	40	62.50
IV	1992	30	100	70.00
V	1993	40	200	80.00
VI	1994	100	400	75.00
VII	1995	150	750	80.00
VIII	1996	200	1100	81.82
IX	1997	300	1200	75.82
X	1998	700	1350	48.15
XI	1999	850	1400	39.29

Source: Field Survey

Marketing margin is the difference in price paid for a commodity as it moves from the primary producer. It can also be defined as the outcomes of the demand for and the supply for such services.

$$\text{Marketing Margins} = \frac{\text{Selling Price} - \text{Supply Price}}{\text{Selling Price}} \times 100$$

Marketing middlemen perform services that add value to the product. Marketing margin is a payment of value added for processing storage, transportation and distribution. The marketing margin represents the farmers share of the consumers Naira. Between (1989)and (1990), the marketing margin rose from (33.33% to 66.67%) and then declined to (62.50) in

(1991). The margin rose from (70%) in (1992) to (81.82%) in (1996), after which it progressively declined to (39.29%) in (1999).

The farmers buy these fertilizers at government approved prices and later sell them to other farmers or consumers at exorbitant rates. Some farmers connived with some members of staff of the local government to perpetrate this evil act, by so doing enrich themselves.

TABLE 4.8 MODE OF TRANSPORTATION

S/NO.	MODE OF TRANSPORT	NO.	%
I	Head Potterage	216	16
II	Wheel Barrow	243	18
III	Hired motorcycle	265	27
IV	Motor Vehicle	472	35
V	Animals	54	04
	TOTAL	1350	100

Source: Field Survey

Transportation is a physical function. Physical functions are specialized functions or activities that involve the physical change of the position of the commodity itself. They are involved in solving the problem of what, when and where in marketing. They include transportation, processing and storage i.e. transportation and shifting of the products from the place of production to the place of consumption thus creating the needed place utility.

Some of the farmer use mostly motor vehicles in transporting their fertilizers to their homes. For the areas that are not accessible to motor vehicles, motorcycles are employed to transport these fertilizers. About one quarter (27%) of the respondents use this means of transportation. It has been observed that motorcyclist charge more than the buses or taxi drivers, despite the fact that their motorcycles can only carry few bags of fertilizers at any given time. Both motor vehicles and motorcycles are used for transporting fertilizers for long distances. Wheel borrows are used by one-fifth (18%) of the farmers in shifting fertilizers from either the motor vehicles or from the motorcycles, especially from the bus stop to the destination of the farmers (short distances).

A little above one- tenth (16%) of the respondents transport their fertilizer(s) by carrying it on their heads while a negligible portion of the farmers (4%) use animals like donkeys to transport their fertilizers to their homes.

TABLE 4.9 TRANSPORTATION PROBLEMS

474760

S/NO.	PROBLEMS	NO.	%
I	High Cost of Transportation	432	32
II	Bulkiness of Fertilizers	108	08
III	Maintenance	540	40
IV	Infrastructures	202	15
V	Lack of Drivers	68	05
	TOTALS	1350	100

Source: Field Survey

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Table 4.9 reveals that the major transportation problem affecting the Kaduna North Local Government Area is that of maintenance. This is a management problem. This cuts across the executive; to the driver. The executive;are responsible for the release of funds for the purchase of spare parts for these vehicles. The drivers and other members of staff of the maintenance unit of the local government were to ensure that these parts were purchased according to specifications and coupled to these vehicles. The drivers are also charged with the responsibility of ensuring that the engine oil and water levels of their vehicles were within the acceptable range. They are to make sure that the headlights and the break of the cars were functioning properly. This must be a daily routine before they pedals the vehicles. Any anomaly should be reported to the authorities concerned.

Some of the problems of transportation identified by this study includes:

1. The lack of adequate transportation facilities in terms of trucks, pick-up vans, lorries or tippers required for the shifting of farm inputs from one place to another.
2. The corresponding high cost of the commercial transportation of fertilizers.
3. Lack of spare parts to replace the worn out parts of the grounded government vehicles.

4. The cooperative department were running short of drivers who will handle the procurement and distribution of fertilizers. More of the Grade 'A' or grade one drivers are required to facilitate the quick delivery of the farm inputs as they arrive at the department.
5. Inadequate marketing outlets resulting from poor infrastructural facilities like good roads (roads are potholed or water logged).
6. There is delay in the delivery of fertilizer consignments by Government officials which is as a result of the delay of the release of functional government vehicles.
7. The bulkiness of fertilizers often makes commercial vehicle owners to shun carrying farmers who have fertilizers to be transported for some appreciable distance.
8. In the event where motor cycles were used, the number of bags of fertilizers that would be conveyed will be limited.
9. In the event of breakage (damage) during transportation, fertilizers do corrode the vehicles in which they were conveyed.
10. Transportation of fertilizers for long distances does a lot of damage to our tarred roads.

TABLE 4.10 FARMERS' SOURCES OF FINANCE

S/NO.	FINANCING SOURCE	NO.	%
I	Esusu	459	34
II	Banking	365	27
III	Local Money Lenders	122	09
IV	Trading	175	13
V	Buying of Farm animals	229	17
	TOTAL	1350	100

Source: Field Survey

The marketing facilitating functions are tasks that make possible the smooth performance of the exchange and physical functions. Those activities do not involve the direct exchange of title or the physical handling of the products in the marketing system. These functions are: sorting, grading and standardization, packaging, risk bearing and insurance, financing and market intelligence.

Financing is the provision of money and credit necessary to carry the product over time throughout the marketing channel. The peasant farmers lack sufficient money and adequate credit necessary to carry their products over time throughout the marketing channel. The peasant farmers also lack sufficient capital and adequate loan facilities to run the activities of their farms. Hence they tie up their capital by saving through ESUSU.

Table 4.10 reveals that (34%) of the respondents practice this traditional way of saving money. About (₦100-200) were collected by

members of a co-operative society on a monthly basis. The leaders of a co-operative society always decide the order of the takings until every society member receive his own share of the contribution. It is often criticized that "ESUSU" does not enhance Agricultural development because of the nature of its takings (very small) and the corresponding timing associated with the takings (always in conflict with the production period). About (27%) of farmers take their money to commercial banks so as to enhance their ability to borrow especially when the need arises. Others (17%) prefer to invest their money in the rearing of farm animals like goats, pigs, cows, ducks and chickens etc. The farmers can sell any of these animals in order to purchase fertilizers during the farming season. Some of these farmers (9%) turned out to become money lenders by lending to their colleagues who have one need or the other to meet at a higher interest rate. On the other hand, about (13%) of the farmers sell food grains like maize rice and beans while others indulge in petty trading of detergents, beverages and bread, etc.

Table 4.11 FARMERS SOURCES OF INFORMATION

S/NO.	SOURCES	NO.	%
I	Gossip	203	15
II	Group meetings	473	35
III	Neighboring traders	202	15
IV	Radio	256	19
V	Television	216	16
	TOTALS	1350	100

Source: Field Survey

An effective and efficient marketing depends on information. Market intelligence involves collection analyzing and disseminating of a large variety of data necessary for the smooth operation of the marketing system.

Table 4.12 STRATEGIES USED BY MIDDLEMEN

S/NO	STRATEGIES/FACTORS	NO.	%
I	CAPITAL (MONEY)	375	34
II	INFORMATION	198	18
III	TRANSPORTATION FACILITIES	276	25
IV	CLOSENESS TO FARMERS	121	11
V	POSITIONS/OFFICES	77	7
VI	OTHERS (UNKNOWN)	58	5
	TOTAL	1105	100

SOURCE: FIELD SURVEY

Table 4.12 reveals the various strategies that middlemen utilize in the marketing and distribution of fertilizers.

These middlemen have large sums of money and other capital assets that facilitates their activities because of their links with the top functionaries of some financial institutions. Some of these middlemen are the farmers themselves. Some are staff of the local government department, traditional group leaders, Absentee or big time farmers that live in the towns or cities, money lenders etc. Their relative access to capital enables them to purchase fertilizers in large quantities and stock them at their warehouses or at undisclosed destinations. when the farmers are in need of the input, they sell it to them at a very high price because they are aware of the importance of the commodity to the farmers. About (18%) of the respondents believe that the middlemen have a very good market information because they know when the farmers need the commodity

$$\bar{X} = \frac{\sum X}{n} = \frac{374}{10} = 37.4 = 37$$

$$S^2 = \frac{\sum (X - \bar{X})^2}{n} = \frac{1356}{10} = 135.6$$

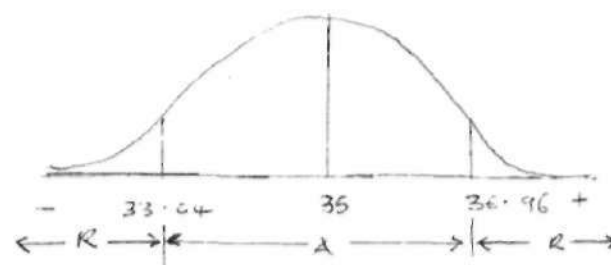
$$S = \frac{\sum (x - \bar{x})^2}{n} = \frac{1356}{10} = 36.82 = 37$$

Standard error

$$S_x = \frac{S}{\sqrt{n}} = \frac{37}{\sqrt{1350}} = \frac{37}{367} = 1$$

$$35 + 1.96 (1) \text{ bag}$$

$$33.04 \text{ to } 36.96$$



R = REJECTION ZONE
A = ACCEPTANCE ZONE

$$Z = \frac{\bar{x} - \mu}{s_x} = \frac{37 - 35}{1} = \frac{2}{1} = 2$$

At 5% level of significance z value

DECISION

Since the calculated Z value (2) is outside (± 1.96) then reject H^0

This therefore signifies that there are relatively limited quantities of fertilizers at the local government secretariat for the farmers to procure.

YEAR	FERTILIZERS		GOVT. MARKET		PERCENTAGE		MARKETING	
	QQ. DD	QQ. SS	PRICE	PRICE	CHANGE IN		MARGIN	
					GOVT. PRICE	MARKET PRICE		
1989	10	7	10	15	00.00	00.00	-	33.33
1990	15	10	10	30	00.00	50.00	-	66.87
1991	20	13	15	40	33.33	25.00	-	62.50
1992	30	10	30	100	50.00	60.00	-	70.00
1993	37	20	40	200	25.00	50.00	-	80.00
1994	40	22	100	400	50.00	50.00	-	75.00
1995	55	30	150	750	33.33	46.67	-	80.00
1996	50	24	200	1100	25.00	31.82	-	81.82
1997	45	21	300	1200	33.00	08.33	-	75.82
1998	42	17	700	1350	57.14	11.11	-	48.15
1999	40	20	850	1400	17.65	03.57	-	39.29
TOTAL	334	194	-	-	-	-	-	-

SOURCE: FIELD SURVEY (TABLE 4.6, 4.7 & 4.13)

TABLE 4.14 FACTORS AFFECTING FERTILIZERS AVAILABILITY

S. NO.	FACTORS	NO.	PERCENTAGE
I	SMUGGLING/DIVERSION	378	28
II	HOARDING	270	20
III	SUPPLY LESS THAN DEMAND	432	32
IV	LOGISTICS	162	12
V	CAPACITY UNDER UTILIZATION	108	08
TOTAL		1350	100

SOURCE: FIELD SURVEY

H_1 : U= Price Differentials is caused by demand and Supply

H_0 : U= Price differentials is not caused by demand and supply

From the information collected from Table 4.6, 4.7 and 4.13 You can deduce the fertilizer price fluctuation within the period under review. The market price fluctuated from (₦15 to ₦1400) while the government approved price of fertilizer rose from (₦10 to ₦350). The percentage change in the prices ranges from (00.00 to 60.00%) for both the market and government prices respectively within the period under review.

Table 4.14 shows that (32%) of the respondents believe that we have relatively little quantities of fertilizers at the local government secretariat because the quantities of the fertilizers that were supplied by the government to the local government council were always less than the quantities that were demanded by the council. Another attributing factor is

smuggling or diversion, about (28%) of the respondents agree with this reason. About (20%) of the respondents are of the notion that Hoarding is the cause for the relatively smaller quantities of fertilizers that we have at the local government council.

The data on tables 4.6, 4.7, 4.13 and 4.14 are relatively adequate information that would support the fact that farmers have relatively little fertilizers because the quantities that were supplied by the government were less than the quantities that were demanded.

DECISION

Since (32%) of the respondent agree with the fact that quantity supplied is less than the quantity demanded, we can deduce that price differential is experience because of the push and pull factors of demand and supply rather than smuggling and hoarding. Hence the alternative hypothesis should be accepted while the null hypothesis should be rejected.

TEST FOR THE THIRD HYPOTHESIS

$H_1:U=$ Removal of fertilizer subsidy is responsible for the fertilizer shortage

$H_0:U=$ Removal of fertilizer subsidy is not responsible for the fertilizer shortage

Table 4.5 FERTILIZER CONSUMPTION (50KG BAG) BY THE KADUNA NORTH LOCAL GOVERNMENT

YEAR	FERTILIZERS		GOVT. PRICE
	QUANTITY DEMANDED	QUANTITY SUPPLIED	₦
1989	25,119	22,258	10
1990	31,574	28,500	10
1991	74,054	48,810	15
1992	98,627	53,009	30
1993	66,708	66,708	40
1994	70,123	54,364	1000
1995	82,444	80,111	150
1996	92,345	60,354	200
1997	96,042	54,678	300
1998	98,146	45,785	700
1999	102,200	30,000	850
TOTAL	837,386	544,577	

TABLE 4.13 A FARMER'S FERTILIZERS CONSUMPTION

YEAR	FERTILIZERS		GOVT. PRICE
	QUANTITY DEMANDED	QUANTITY SUPPLIED	₦
1989	10	7	₦15
1990	15	10	₦30
1991	20	13	₦40
1992	30	10	₦100
1993	37	20	₦200
1994	40	22	₦400
1995	55	30	₦750
1996	50	24	₦1100
1997	45	21	₦1200
1998	42	17	₦1350
1999	40	20	₦1400
TOTAL	384	194	

SOURCE: FIELD SURVEY

The year (1995) was believed to be the year when the full implementation of the removal of the subsidy on fertilizer was embarked upon by the Federal Government of Nigeria.

Table 4.6 and 4.13 shows that despite the increasing demand for fertilizers by both the Local Government and the Farmers Co-operative societies, the quantities supplied kept on decreasing. Invariably, this means that relatively little quantities of fertilizers are available for the farmers to purchase. Hence the farmers had small quantities of fertilizers at their disposal.

The removal of the subsidy have resulted into a corresponding increase in the price of the commodity. From 1995 to 1999, both the government and the market prices increased by 467% and 87% respectively.

DECISION

The Null-hypothesis should be rejected while the alternative hypothesis should be accepted based on the data and information available from tables 4.5 and 4.13. Hence the removal of the subsidy on fertilizers could be responsible for the shortage in supply of fertilizers that is required by the farmers' co-operative societies through the local government secretariat or council.

4.5 RESULTS/FINDINGS

This study have discovered that there are relatively little or small quantities of fertilizers at the Kaduna North Local Government Area.

This is so because the quantities that were supplied by the government were less than the quantities that were demanded by the farmers' co-operative societies as opposed to the claim that there were adequate quantities of fertilizers at the local Government Council and members of staff of the council/middlemen inturn divert them to undisclosed destinations. A sum total of 837,386 bags of fertilizers were demanded by the council but only 544,577 bags were supplied. Each farmer demanded for 358 bags but only 194 bags were supplied to him during the period under review. The scarcity of the commodity is caused more by the push and pull factors of demand and supply than by smuggling and hoarding.

The removal of subsidy could also be responsible for the shortage of the commodity and the price differentials that was experience by the farmers, although one should also take into cognisance the presence of the global economic recession that is accompanied by hyper inflation or galloping inflation as the case may be. This may lead to a general increase in the prices of fertilizers and other farm inputs too.

The transportation problem is a management problem that cut across the levels of the executives of the council to the drivers. The bureaucracy in the release of funds by the executive for the purchase of the spare parts by the purchasing officer and also to the management of the cars by the individual drivers is an issue of conscience, truth and honesty. Conscience they say is a wound that only truth can heal. This makes up the integrity of a man.

CHAPTER FIVE

5.0 SUMMARY CONCLUSION AND RECOMMENDATION

This chapter contains the summary of findings, conclusions and the possible recommendations for the marketing and distribution of fertilizers.

5.1 SUMMARY

The marketing and distribution of fertilizers by the various farmers co-operative societies in Kaduna North Local Government started between 1984 and 1985. The marketing system is not well developed because of the lack of any physical setting or structure for this market.

Chapter one highlights the fact that the area of Agricultural marketing is the most important area where co-operative role is very remarkable. The most striking issue within the last decade is the unprecedented rise in the prices of food and Agricultural raw materials. The concern of the generality of the Nigerian Farmers today is how to tackle the escalating or skyrocketing fertilizer price which has exceeded (3000%) despite the government's huge investment in fertilizer importation, the National Fertilizer Company of Nigeria, Onne and the Federal Superphosphate Fertilizer company at Kaduna etc. The quantities of the fertilizers that were supplied by the government were always less than the quantities that were demanded by the farmers cooperative societies. There is also the problem of inconsistencies in the quantities of fertilizers that were distributed to the

different co-operative societies. Top government officials and some middlemen tend to aggravate this problem by either smuggling, hoarding or diverting the fertilizers to undisclosed destination.

To be more specific the problems of the marketing and distribution of fertilizer at Kaduna North Local Government includes; the lack of adequate quantities of fertilizers at the Local Government's Store house, the dual problem of artificial scarcity caused by the nefarious activities of some top government functionaries/middlemen coupled with the corresponding increase in the cost of transportation and the lack of spare parts to replace the worn out parts of the government vehicles that are used in the transportation of fertilizers. The bottom line of the issue is the lack of adequate funds to service and maintain such vehicles.

Sequel to the realisation of these problems, this study was carried out on the premises of determining the quantities of fertilizers that were allocated by the government to the different farmers co-operative societies through the local government secretariat during the period under review, to discover the problems encountered by farmers in meeting their desired transportation utility, to estimate the price differentials or rather the price fluctuations that were experienced by the farmers and also to critically analyse the gimmicks (tactics/strategies) played by top government officials/middlemen on the marketing and distribution of the input.

Chapter two is a review of related literature. McCarthy defined marketing as the performance of business activities that directs the flow of goods to consumers or users in order to satisfy customers and accomplish

the firm's objective. J.O. Olukosi and S.U. Isitor defined Agricultural marketing from both the micro and the macro-view. The micro view is concerned with the individual participants in marketing be it the farmer or the business firm. The macro view examines marketing to encompass the total system of the economic activities concerned with the flow of Agricultural products from producers to final consumers, the kinds of institutions and the price making mechanisms that guides those flows, the interaction among consumers, Agri business firms, farmers and even government that determines the levels of expenditures and incomes to market participants.

The (ILO) International Labour Organization defines co-operatives as an association of persons who have voluntarily joined together to achieve a common end through the formation of a democratically controlled organisation making equitable contributions to the capital required and accepting a fair share of the risk and benefits of the undertakings in members actively participating. Knap visualised the benefit of Agricultural co-operative as having a wider impact. He advanced co-operation as a means of increasing farmers income and thereby improving the general prosperity of rural communities in a way of helping to preserve the economic independence of producers and regulating competition in the Agricultural Community for the benefit of all the farmers.

Chapter three is an explicit explanation of the research methodology. The Research Design is a longitudinal type. The cohort and the trend

methods of survey design were utilised. There are a sum total of (89) eighty-nine cooperative societies in Kaduna North Local Government Area with a minimum of about (25) twenty five members per society. These societies were critically studied and analysed. Two detailed questionnaires with both closed and open-ended questions were administered to both the members of the farmers co-operative societies and also the members of staff of the Kaduna North Local Government. Among the (89) eighty-nine farmers co-operative societies in Kaduna North Local Government, (50) fifty farmer co-operative societies were randomly selected and questionnaires were administered to (24) twenty four members of each of these societies. About (100) one hundred members of staff of the Kaduna North Local Government were also served with these questionnaires. In a nutshell, this study had an estimated population sample of about (2,700) two thousand seven hundred respondents. The samples size of this study is (50%) fifty percent of the estimated sample population. This is a cohort or rather a fair representation of the sample population. To be precise this study has a sample size of (1350) One thousand three hundred and fifty respondents.

The statistical tools that were used for this study were the measures of central tendency, percentages and time series analysis. Mean, Median and Mode measures were used to analyse all the information and data

collected for the period under review.

Chapter four is a detailed presentation of the findings of this research. A sum total of 837,386 bags of fertilizers were demanded by the local government council and a sum total of 544,577 bags were supplied for the years under review (1989-1999). A farmer's average fertilizer request for the period under review was 384 bags. A sum total of 194 bags of fertilizers were supplied to a farmer during that same period. The government's approved price of fertilizers rose from (₦10 to ₦850) while that of the market rose from (₦15 to ₦1400) Hence there was 8400% and 9,233% increase in the prices of fertilizers respectively for the period under review. This shows how inflation and some economic policies like the removal of subsidy have affected the prices of fertilizers.

The kinds of fertilizers that farmers requested from the ministry of Agriculture or from open market or even from the Farmers' Supply Company (FASCOM) were compound (N.P.K.) fertilizers, Urea, Supa, Dap etc. Some farmers buy fertilizers at government approved prices and sell these fertilizers to other group of farmers or market people at the market prices. Where there are exceptionally high demand for the inputs, the farmers may sell the fertilizers far above the market prices. This nefarious activity is often carried out by few members of the farmers who sometimes connive with the middlemen to perpetrate this dastardly act even though the findings of this study shows that the pull and push factors of

demand and supply determine the prices of fertilizers. It has also been established that there are relatively little quantities of fertilizers at the local government secretariate because the quantities that were supplied by the government were less than the quantities that were demanded by the farmers co-operative societies through the local government secretariate. The removal of the subsidy on fertilizer and the subsequent handing over of the issues of fertilizer importation into the hands of private individuals has compounded the issue of the marketing and distribution of fertilizers at Kaduna North Local Government Area to be specific and Nigeria as a nation in general. If a drastic action is not taken by the Federal government, in order to reconsider this policy and if possible reform it, then the government's dream of poverty alleviation and transforming the agrarian sub-sector would be an illusion.

Motorcycles and motor vehicles were popularly used in transporting fertilizers from the co-operative department to various destinations. The transportation problem is purely a management problem which ranges from bureaucratic red-tapism in the release of funds for the purchase of spare parts to mismanagement on the parts of the drivers. The high cost of transportation is another factor that is inimical to the marketing and distribution of fertilizer.

5.2 CONCLUSION

Fertilizers like N.P.K., Urea, D.A.P, Supa (S.S.P.) e.c.t were requested by most farmers during the period under review.

These farmers always received inadequate quantities of these fertilizers from the local Government secretariate. The removal of subsidy on the commodity has made it impossible for the farmer to have access to the commodity because his savings are small and even when he has the money to purchase the input, It's procurement becomes extremely difficult because it is relatively unavialable. The middle men have more money, more transportation facilities and more information than the peasant farmers, hence they can compete more favourably than them in the open market. They tend to have a more sustainable competitive advantage (SCA) than the farmers.

Fertilizers are the life wire of most farming activities, especially when it has to do with crop production in the North. Their prices had increased by over 3000% and sooner or later another summer will be by the corner. I will strongly recommend that the following suggestions be looked into, perhaps it will go a long way in bringing about the desired change.

5.3 RECOMMENDATIONS

- (a) The government, through the ministry of Agriculture should evolve an effective and an efficient plan to increase the quantities of fertilizers allocated to farmers' co-operative societies, annually.
- (b) Fertilizers should be released to farmers at an appropriate time before the farming season commences so that they can plan their production activities properly.

- (c) Government should plan ways of combating or debunking the rapid or exponential fertilizer price fluctuation to a level that would be affordable by most peasant farmers.
- (d) Agro-chemical companies, as intergral parts of petrochemical companies should be encouraged to expand their formulation plants so that the capacity for local production can be increased substantially and subsequently.
- (e) The co-operative department/ the local government authorities should purchase spare parts to uplift their grounded vehicles and also employ qualified drivers. This will enhance or rather facilitate quick delivery of farm inputs to farmers.
- (f) Government should restructure or reorganise the administrative set up at the local government council and also at the co-operative department from time to time and where need be, alternate positions, functions or roles, by transfers. This will eradicate the disgusting favouratism often exhibited by the members of staff of the co-operative department vis-a-vis the staff of the local government council. Hence their connivance with middlemen will also be curtailed.
- (g) Government should extend credit/loan facilities to farmers through the Agric banks, commercial banks or merchant banks. This will enable the farmers to finance their productive Agricultural activities.
- (h) The road networks should be improved upon, feeder roads should be tarred and bad bridges linking most villages with the cities should be reconstructed through the activities of the state and the federal ministries of works and housing.

- (i) Subject matter specialist and extension agents who are adequately trained in the use of Agrochemicals and fertilizers should be employed to provide the technological support for the use of the inputs in the major areas of production.
- (j) The government should revisit the issue of fertilizer subsidy and provide one. If not, a possible alternative to a subsidy-should be provided to the Nigerian Farmers.
- (k) Companies like National Fertilizer company of Nigeria (NAFCON), Federal Superphosphate Fertilizer Company (FSFC) and other fertilizer companies that have been capacity under utilized should be utilized to its maximum capacity by the government.
- (l) The Federal Government should increase its statutory allocation to the Local Government Council. This will enhance its ability to carryout many rural development programmes. The marketing and distribution of fertilizers is one of such programmes.

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APPENDIX I

LIST OF SAMPLED FARMERS CO-OPERATIVE SOCIETIES

1. Unguwan Shanu Farmers Co-operative Society
2. Barnawa Lowcost Livestock and Farmers Co-operative Society.
3. Kakuri Gwari Farmers Brigade co-operative society.
4. Burji II Farmers co-operative society
5. U/Rimi Central Farmers co-operative society
6. Mashi Gwari Farmers co-operative society
7. Kaduna Dadin Kowa Farmers multi-purpose co-operative society.
8. Kabala/2 farmers multi-purpose co-operative society
9. Sabon Gari Badarawa farmers co-operative society
10. U/Rimi Arewa Farmers co-operative society
11. Kaduna Garden Farmers co-operative society
12. Makera co-operative society
13. Kabala Gabas co-operative society
14. Sabon Gida Farmers co-operative society U/Rimi
15. Unguwan Sanusi Farmers Co-operative society
16. Down Quarters co-operative society Kakuri, Makera
17. U/Rimi WWomen Farmers multi-purpose co-operative society.
18. U/Rimi Livestock and Farming Co-operative society
19. U/Kinkinau Farmers co-operative society
20. Tudun Wada farmers co-operative society
21. Kabala Costain co-operative group farmers Society
22. Himma Farmers co-operative society Limited
23. Alheri farmers multi-purpose co-operative society
24. U/Kadara Farmers co-operative society
25. Dadin Riba Farmers co-operative society
26. Panteka Farmers co-operative society
27. Hope farmers multipurpose co-operative society
28. U/Rimi farmers co-operative society
29. Alheri farmers co-operative society
30. Unguwan-Dosa/R.gasa farmers co-operative society
32. Malali Farmers cooperative society

33. Sabon Garin Mandon Farmers co-operative Society
34. Kakuri Hausa farmers co-operative society
35. Ung. Television group farmers co-operative society.
36. Haske farmers co-operative society
37. Badarawa Farmers co-operative society
38. Gindin Dutse farmers co-operative society
39. Nagarta farmers co-operative society
40. Tudun Nupawa farmers co-operative society
41. Kaduna-doka co-operative society
42. Fishermen co-operative society
43. Faki Road farmers co-operative society
44. Kawo Butchers co-operative society
45. Progressive farmers co-operative society
46. Arewa Farmers co-operative society
47. Layin Kosai T/Wada farmers co-operative society
48. Jaji Farmers co-operative society
49. Unguwan Dusa/R-gaza cooperative society
50. Malali Farmers multi purpose cooperative society

These societies located in the following areas:

1. Unguwan Rimi Settlement
2. Unguwan Kudu Settlement
3. Tudun Wada Kaduna Settlement
4. Malali Lowcost /Village Settlement
5. Unguwan Dosa/Badarawa Settlement
6. Mando Settlement
7. Barnawa Settlement
8. Kakuri makera Settlement
9. Kawo Settlement
10. Unguwan Sanusi settlement

APPENDIX II

Dept. of Business Admin.,
Inst. of Administration,
Ahmadu Bello University,
Zaria.
10th November, 1999

Dear Sir/Madam,

Kindly assist me in filling this questionnaire.

I am a Masters in Business Administration (MBA) student undertaking a research on the marketing of Fertilizers in Kaduna North Local Government Area, the Role of Farmers Co-operative Societies.

Any information given to me will be handled confidentially.

Thanks for the anticipated co-operation.

Yours faithfully,

James Runi

FARMERS QUESTIONNAIRE

1. What is the name of your co-operative society?
.....
2. How many registered members do you have in your society?
.....
3. How often does your co-operative society meet to discuss common issues that affect members of the society?
.....
4. How often do you visit the local government secretariat?
.....
5. When does your society places or rather makes it's request for fertilizers for a farming season?
.....

Q.6 When does your society gets the supply of the fertilizer demanded for by the Farmers?
.....

Q.7 What are the procedures you follow before receiving the quantities of fertilizers you requested for?
.....

Q.8 How does your society share the fertilizers among it's members?
.....

Q.9 What is the distance of your co-operative society from the local government secretariat.
.....

Q.10 What were the quantities demanded, quantity supplied and the price at which you procured fertilizers for the following years.

YEAR	QUANTITIES DEMANDED	QUANTITY SUPPLIED	PRICE
(YR)	(QQDD)	(QQSS)	(P)
(1989)
(1990)
(1991)
(1992)
(1993)
(1994)
(1995)
(1996)
(1997)
(1998)
(1999)

Q.11 When did you start the marketing and distribution of fertilizers.
.....

Q.12 What are some of the problems that you encountered with the marketing and distribution of fertilizers?
.....

Q.13 What do you think is responsible for the rise in price of fertilizers?
.....

Q.14 What is responsible for the scarcity of the fertilizers at the local government secretariat?
.....

- Q.15 What was your experience on the availability of fertilizers to farmers when the subsidy was not removed.
.....
- Q.16 What is the impact of the removal of Government subsidy on fertilizers on the prices of fertilizers?
.....
- Q.17 What was your experience on the availability of fertilizers to farmers when the subsidy was removed?
.....
- Q.18 What are the types of fertilizers that are supplied to you by the local government?
.....
- Q.19 What are the transportation problems that you encounter with while trying to procure and shift your fertilizer to its destination.
.....
- Q.20 What are the tricks that the local government staff use to divert fertilizers?
.....
- Q.21 What ways/methods can be adopted to curb these vices?
.....
- Q.22 What kind of treatment does the local government staff give to you?
.....
- Q.23 What are the factors that causes the delay in the delivery of fertilizers?
.....
- Q.24 What are the inconsistencies you experience in meeting your desired transportation utility?
.....
- Q.25 What are some of the undesigned channels through which the local government staff divert fertilizers from the local government?
.....
- Q.26 What are some of the problems you encounter with your officials when it comes to fertilizer distribution?
.....
- Q.27 What channels do your official use in diverting fertilizers?
.....
- Q.28 What are the resources/Assets/skills that the middle men have that you as a farmer do not have?
.....
- Q.29 What are your resources/Assets/skills as a farmer?
.....
- Q.30 What suggestion can you give on how to improve the marketing and distribution of fertilizers by your society?
.....

- (1994)
- (1995)
- (1996)
- (1997)
- (1998)
- (1999)

Q.15 What means of transportation does the Local Government (LG) use in transporting the input?
.....

Q.16 What transportation problems does the (LG) encounter after procuring the inputs?
.....

Q.17 What other cooperative society does the Local Government sell fertilizers to?
.....

Q.18 How does the removal of subsidy on fertilizers affects the quantity of fertilizers that are allocated to the Local Government?
.....

Q.19 What are the hidden or secret ways/methods/devices that Government officials use in diverting fertilizers?
.....

Q.20 What do you think are the possible causes for the artificial scarcity of fertilizers?
.....

Q.21 What are the possible channels or mediums that are used to divert fertilizers from their normal channels?
.....

Q.22 What are the pranks/gimmicks that are played by the members of staff of the Local Government or top Government functionaries in fertilizer marketing?
.....

Q.23 Please can you mention some of the ways in which fertilizers are being diverted from the Local Government store?
.....

Q.24 Please can you suggest ways in which this diversion can be curbed or controlled?
.....

PLEASE TICK THE CORRECT ANSWER

Q.25 What is your opinion about the services of the Local Government to the farmers cooperative societies?

- A. Excellent B. V.Good C. Good D. Fair E. Poor

- Q.26 What is the state of the vehicles in the Local Government?
A. Excellent B. V.Good C. Good D. Fair E. Poor
- Q.27 How will you evaluate the raising of licence purchase orders (L.Pos) to purchase spare parts by the Local Government area?
A. Excellent B. V.Good C. Good D. Fair E. Poor
- Q.28 What is your opinion about the method of distribution of fertilizers that was adopted by the Local Government?
A. Excellent B. V. Good C. Good D. Fair E. Poor
- Q.29 What is the nature of the treatment given to the farmers by the Local Government staff?
A. Excellent B. V. Good C. Good D. Fair E. Poor
- Q.30 What do you feel about the time in which the farmer get their supply of fertilizers from then Local Government?
A. Excellent B.V. Good C.Good D. Fair E. Poor