NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: AEM450

COURSE TITLE: AGRICULTURAL FINANCE AND MARKETING

COURSE GUIDE

AEM450
AGRICULTURAL FINANCE AND MARKETING

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Introduction

Agricultural Finance and Marketing is a fourth year, three -credit unit degree course available to all students pursuing the Bachelor of Science (B.Sc. Agric. Economics) in any university. This course will also be suitable as an elective course for anyone who intend to study business administration and other social science related courses. It deals with basic principles of financing and marketing of products which may not be necessarily agricultural in nature. This course has four modules. The four modules have fifteen units. The first module introduced the meaning and scope of Agricultural finance, sources of finance/credit agencies, credit utilisation, credit instruments and loan repayment methods.

The second module focuses on farm records and accounts. It explains the importance of keeping farm records, itemised principles of farm accounting and the preparation of financial statement. It also explains budgeting as a planning tool and identifies financial control/approaches to efficient credit management. The third module starts with an introduction. This focuses on the meaning of marketing, types of market and roles of marketing in agricultural business. Module four highlighted the problems of agricultural marketing and agricultural demand pattern analysis. In this module, you will also be familiar with agricultural supply analysis.

What You Will Learn in This Course

You will learn about the concept and scope of agricultural finance and marketing.

Course Aims

The course aim is to provide an understanding of agricultural finance and marketing.

Course Objectives

To achieve the aims set out, the course has a set of objectives. Each unit has specific objectives which are included at the beginning of each unit. You should read these objectives before you study the unit. You may wish to refer to them during your study of the unit to check on your progress. You should always look at the unit objectives after completing a unit. By doing so, you will be able to locate your bearing and level of attainment of the objectives of the unit.

At the end of the course, you should be able to:

- explain the meaning and scope of agricultural finance and marketing
- identify sources of finance/credit agencies
- discuss the concept of farm records and accounts
- identify the types of market and marketing functions
- discuss factors affecting demand and supply.

Working through This Course

To complete this course, you are expected to read each study unit of this study material. Each unit contains self-assessment exercises for this course and at certain points in the course you would be required to submit assignments for assessment purposes. At the end of the course, there is a final examination. Below you will find the components of the course. It is advisable to always attend the tutorial sessions where you have the opportunity to compare knowledge with your colleagues.

The Course Materials

The major components of the course are:

- Course guide
- Study units
- Assignments
- References

Study Units

The course is divided into modules that are made up of units. The study units in this course are as follows:

Unit 4 Budgeting
Unit 5 Financial Control/Approaches to Credit Management

Module 3 Marketing

Unit 1 Marketing Function
Unit 2 Types of Market
Unit 3 Agricultural Supply Pattern Analysis

Module 4 Agricultural Demand and Supply Pattern Analysis

Unit 1 Problems of Agricultural Marketing
Unit 2 Agricultural Demand Pattern Analysis
Unit 3 Agricultural Supply Analysis

Each unit consists of one to two weeks work and include an introduction, objectives, reading materials, exercises, conclusion, summary, tutor-market assignment (TMA), references/further readings.

Text Books and References

Apart from this study unit, some reference materials are provided as additional reading materials to support your study. You can also have access to them in libraries and even on the internet.

Assignment File

In your assignment file, you will find all the details of works you must submit to your tutor for marking. The marks you obtain for these assignments will count towards the final mark you obtain for this course.

Assessment

There are three aspects to the assessment of the course. First are self-exercises, second are the tutor-market assignments and the third is the written examination/end of course examination. The overall score in the course will be a sum of 30% of continuous assessment and 70% of written examination.

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MODULE 1 MEANING AND SCOPE OF AGRICULTURAL FINANCE

UNIT 1 SOURCES OF FINANCE/ CREDIT AGENCIES

CONTENTS

1.0 INTRODUCTION

Agricultural finance is the economic study of the acquisition and use of capital in agriculture. Agricultural credit refers specifically to the process of obtaining control over the use of money, goods and services in the present, in exchange for a promise to repay at a future date.

Agricultural finance deals with the supply and demand for funds in the agricultural sector of the economy. Knowledge of the fundamental economic management principles and analytical procedure facilitates obtaining control over capital and using it efficiently. Investment analysis helps determine how much capital it will pay to allocate to alternative uses. Financial analysis relating to income, repayment capacity and risk management indicates the total amount of capital the farm business can profitably and safely use. Information on legal aspects of borrowing, leasing and contractual arrangements helps the farmer select the means of acquiring and controlling recourses that will contribute most to his farming operation.

Also, knowledge of the legal and financial aspects of retirement and estate planning can ensure an orderly transition and transfer of farm business to the next generation. An understanding of agricultural credit institutions and the legal and regulatory environment in which they operate helps in the selection of lenders who can provide the proper amount of credit along with the terms and related services needed to adequately finance the business. Even though, we said agricultural finance and agricultural credit are not the same, the terms are commonly used interchangeably. This is because the study of the acquisition and use of capital naturally leads to the process of obtaining and using the capital.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- classify the various sources of finance available to farmers
- identify some of the weaknesses of non-institutional sources of credit
- list some limitations of formal sources of credit.

3.0 MAIN CONTENT

3.1 Classification of Sources of Finance /Credit

The major sources of credit can be classified into institutional or formal and non-institutional sources.

3.1.1 Non-Institutional Sources

The non-institutional or informal sources are those which do not have any uniformity in their lending procedure, their interest rate or their collateral requirement. Loan from such sources are usually made directly to the borrower by the lender and are prevalent in areas where individuals are quite familiar with and share confidence in one another. In other words, the lender knows the borrowing farmer and reasonably vouch-safe for his (borrower's) integrity. The relative ease of obtaining the loans devoid of administrative delays, non-insistence by the lender on security or collateral from the borrower and flexibility built into repayment programmes has made the non-institutional sources very popular among the peasant farmers. Non-institutional sources however have such limitations as smallness of loan, high interest rates etc.
Notable examples under this source include:

3.1.1.1 *Esusu*

The *esusu* is a fund to which a group of individuals sharing common characteristic make a contribution of a fixed amount of money, handed to one person. Each member is able to make use of the money in turn, making allowance for a member in dire need of a loan or advance. These are granted without interest payment.

3.1.1.2 *Ajo*

Here individuals contribute fixed amount of money on a daily basis. The "ajo" collector's duty is to remind contributors of their daily obligation, and safe keep the contributed sum. At the end of each month, the contributors receive their total savings less one day's contribution, the latter being the collector's fee.

3.1.1.3 Money Lenders

These people usually make their money outside the rural community but later settle down in villages giving loans to farmers at exorbitant interest rates. Some farmers who pledge their lands, crops and buildings have lost them due to their inability to pay the high interest rates charged on the principal when due.

3.1.1.4 Friends and Relations

This is part of cultural heritage whereby the prosperous help their less fortunate relatives and friends with loans. In some cases, the loan is not collected back.

3.1.2 Institutional Sources

The institutional sources are those recognised institutions which follow standardised procedures of lending. They lend at regulated interest but normally require some collateral. The loans from this source are always large compared with those obtained from non-institutional sources.
Examples under this source include:

3.1.2.1 Cooperatives

Formal cooperatives can be regarded as a transition or an interphase between formal and informal credit sources. Cooperatives especially thrift and credit societies play important role in saving. They mobilise savings for safe keeping and re-investing in the countryside.

3.1.2.2 Commercial Banks

These are institutions set up by the government or group of private individuals with the aim of accepting savings and deposit from members of the public as well as granting them credit whenever they are in need. Those farmers who keep their money in such banks may be able to get loan from the bank. But due to the inability of most farmers to offer suitable collateral security coupled with the risky and uncertainty nature of agricultural business, commercial banks often prefer to lend to borrowers engaged in non – agricultural ventures which are less prone to risk and uncertainty.

3.1.2.3 Specialised Banks

These are institutions specially set up to meet the need of a particular sector of the economy. For instance, the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) was specifically established to cater for the agricultural sector of the economy.

4.0 CONCLUSION

In this unit you have learnt about the meaning and scope of agricultural finance and identified sources of finance available to farmers.

5.0 SUMMARY

In this unit, you have learnt that:

- sources of finance to agriculture can be classified into two i.e non-institutional (informal) and institutional sources (formal sources)
- non-institutional sources are those which do not have uniformity in their lending procedure, their interest or collateral requirement
- institutional sources are those recognised institutions which follow standardised procedures of lending.

Small-scale farmers prefer loans from non-institutional sources despite some problems such as smallness of loan and exorbitant interest rate associated with the source because it is devoid of bureaucratic bottleneck.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly differentiate between non-institutional and institutional sources of finance.
2. Mention some examples under non-institutional sources of finance.
3. Mention some examples under institutional sources of finance.

7.0 REFERENCE/FURTHER READING

Adegeye, A.J. & Dittoh, J.S. (1985). *Essentials of Agricultural Economics*. Ibadan: Impact Publishers Ltd.

UNIT 2 CREDIT UTILISATION

CONTENTS

1.0 INTRODUCTION

In most developing countries, the development of agriculture has not yet reached the stage where the average small scale farmers make efficient use of farm credit and also of credit facilities. This fact attributable to his traditional approach to farming and other socio-economic problems such as land tenure system, the condition under which the farmers work, illiteracy and so on. Also, the risks involved in modern farming are more that the traditional farmer can bear. Such risks include acquisition of capital, storage, transportation, insurance and marketing. He is therefore left in a situation where he cannot make proper use of credit and credit institutions.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- discuss the various uses or roles of credit in farm business.

3.0 MAIN CONTENT

3.1 The Uses or Roles of Credit in Farm Business

3.1.1 To Protect against Adverse Conditions

Weather, disease and price are all uncertainties in farming. Risk also is virtually impossible to eliminate in farming. Credit can play a major role in protecting the business from financial failure or liquidation when adverse conditions occur.

3.1.2 To Meet Seasonal and Annual Fluctuation in Income and Expenditures

Inputs must be purchased in one period and products are sold later in the years, so cash inflows and outflows typically do not occur at the same time. Using credit to smooth out these fluctuations and so match cash inflows and outflows is essential for efficient operation.

3.1.3 For Production Purpose

This may be to buy inputs such as seeds, fertilizer, tractors, chemicals etc.

3.1.4 Increase Efficiency

The use of credit makes it possible to substitute one resource for another. For example, machinery might be substituted for labour as a means of reducing cost, improving timeliness and increasing the efficiency of the farm business.

3.1.5 Adjust to Changing Economic Conditions

New technological development or changing market conditions may require major adjustment. For example, change from one enterprise to another may require major capital investments.

3.1.6 To Meet Unproductive Purpose

Such as meeting expenses of marriage, funeral, festival, clothing and feeding the family.

4.0 CONCLUSION

You have learnt in this unit that credit is important and necessary in nearly all commercial farm business. It is a unique resource since it provides the opportunity to use additional inputs and capital items now to pay the cost from future earning so the potential to improve net farm should be one of the determining factors in the decision of whether to use credit.

5.0 SUMMARY

In this unit, you have learnt that credit is used:

- for production purpose
- to increase efficiency
- to adjust to changing economic conditions
- to meet unproductive purpose.

6.0 TUTOR-MARKED ASSIGNMENT

Briefly discuss the roles of credit in farm business.

7.0 REFERENCE/FURTHER READING

Warren Lee, Micheal Boehlje, Aaron Nelson & William Murray (1988). *Agricultural Finance.* New Delhi: Kalyani.

UNIT 3 CREDIT INSTRUMENTS

CONTENTS

1.0 INTRODUCTION

A large number of credit instruments or documents are involved in the extension of credit. It is not just a simple exercise of borrower versus lender. It involves entering into complex contracts. As a result of the large number of credit instruments as well as the complexity of negotiation involved and the unfamiliar legal language, the average farmer in developing countries usually consider borrowing from established institutions to be a major problem.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify some credit instruments used in credit extension
- explain the important of these credit instruments in credit extension.

3.0 MAIN CONTENT

3.1 Promissory Note

A promissory note is the primary legal document in most loan contract. It is the written promise of the borrower to repay the loan. When advancing loan funds, the lender receives in exchange a note signed by the borrower promising to pay the lender a certain stated principal with interest on a certain date as specified in the note.

The dominant position of the note in all credit transactions should be clearly understood. There may be tendency to overlook this small form that has much less printed matter that many other legal document, but such as oversight may prove costly, since the borrower's signature at the bottom of a note is a direct obligation holding the borrower liable for payment of the loan according to the stated terms.

In case of default and failure of the proceeds from sale of the collateral to cover the amount due, the borrower usually is till liable for the unpaid balance, and the lender may have other nonexempt property of the borrower sold to satisfy the deficiency. If the lender requires an additional signature on the note, a common condition where the borrower is a young farmer with little capital, the cosigner should study the provisions of the note as carefully as if acting as the borrower, since in effect the cosigner is liable for the payment if the borrower defaults. Notes may be unsecured or they may be secured by real property, personal property or both.

3.2 Mortgages

This is ranked second to the promissory note. It is not only an additional note but a complement. A mortgage is a list of certain property set aside to guarantee the payment of a loan which is set in a promissory note. Mortgages are identical to promissory note in their chief provisions. They are also sometime called indentures.

The mortgage in additions to identifying the property to back up the promissory note contains provisions which establish a priority of claims among lenders according to the filling or according to the mortgage in a court of law. Sometimes a bond and not a promissory note accompanies the mortgage but the general effect is the same. The transaction will be publicised so that other lenders and other members of the public will know about it.

There are Several Types of Mortgages

- **i. Real Estate Mortgage:** Real estate in law is land and landed property. The important feature of real-estate mortgage is the unchanging character of the security.
- **ii. Chattel Mortgage:** These are mortgage on movable property such as animals.

3.3 Purchases on Contract

This is sometimes simply referred to as hire purchase contract. This involves the transfer of the property to the buyer or the purchaser, with the title of the property remaining with the seller until the last installment is paid. Hence purchase on contract is sometimes referred to as conditional sales contract.

4.0 CONCLUSION

This unit has afforded you the opportunity of knowing some of the credit instrument involved in the extension of agricultural credit. You have also learnt the legal implication of these credit instruments in agricultural credit extension.

5.0 SUMMARY

In this unit, you have learnt that:

- credit extension is not just a simple exercise of borrower versus lender but involved what is called credit instrument
- credit instrument used mainly include promissory note, mortgages and purchase on contract.

6.0 TUTOR-MARKED ASSIGNMENT

1. List the major credit instrument involved in the extension of agricultural credit.
2. Briefly discuss some credit instruments involved in the extension of agricultural credit.

7.0 REFERENCE/FURTHER READING

Warren Lee, Micheal Boehlje, Aaron Nelson & William Murray (1988). *Agricultural Finance*. New Delhi: Kalyani.

UNIT 4 REPAYMENT

CONTENTS

1.0 INTRODUCTION

A lender wants to be repaid in cash; he has little interest in repossessing the security or collateral as satisfaction of the debt obligation. Consequently, the ability to repay is an important determinant of whether credit should be extended or not. Over the entire term of any loan, the repayment or payments must cover both principal and interest.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain some methods of loan repayment
- discuss the importance of these methods of loan repayment in credit extension.

3.0 MAIN CONTENT

3.1 Amortization

An amoritized loan is one repaid in a series of payments that cover interest and principal. The term "amortization", strictly speaking means "killing by degrees", which may be interpreted as repaying the loan principal by a series of installments.

3.2 Non-Amortized Loan

Non amortized loans call for payment of the entire principal amount on the expiration of the term of the loan. Typically, non-amortized loans with terms exceeding one year would call for regularly scheduled payments of interest. The traditional farm mortgage was a five-year, non-amortized loan. The borrower paid the interest each year, and every five years the loan would be extended, renewed, refinanced or repaid.

3.3 Partially Amortized Loan

The partially amortized loan, with the unpaid balance of the principal due is considered as a lump sum or balloon payment at the end of the term.

3.4 Other Repayment Plans

Some methods of loan repayment that readily come under this heading include the following:

- **Flexible or Variable Payment:** This call for payments that vary with farm incomes. This method was first proposed as a solution to widespread repayment difficulties during the depression of 1930s.
- **Income-Indexed Variable Payment Plan:** This has three key features; the plan would be compulsory for all borrowers, payment would be based on index of net farm income, and it would include a loan payment insurance element.

Under this plan a farm income index based on a weighted combination of prices received, prices paid for farm inputs, yields, taxes and household living expenses would be used to adjust loan payments. In years when this income index is below 100, the loan payment would be lowered accordingly. In higher income years (i.e when the index exceeds 100) the payment would go up and any excess over the basic scheduled payment would go into an interest-bearing reserve account. To assure that payments could be met even if farm incomes are lower than normal for several consecutive years, an amortization insurance policy taken out by the borrower as a condition of the loan would provide for any deficiencies.

- **Graduate-Loan Amortization Plan:** Under a graduated payment plan, payments during the early years of the loan are lower than would be the case under conventional level-payment plan. As the borrower's income presumably increases over time with inflations, the payment also increases.

4.0 CONCLUSION

This unit has enabled you to understand some of the methods involved in loan repayment.

5.0 SUMMARY

In this unit you have learnt:

- some strategies or methods of loan repayments
- the weakness (s) of each method of loan repayment.

6.0 TUTOR-MARKED ASSIGNMENT

1. Identify some methods of agricultural loan repayment.
2. Briefly discuss four methods of agricultural loan repayment.

7.0 REFERENCE/FURTHER READING

Warren Lee, Micheal Boehlje, Aaron Nelson & Willian Murray (1988). *Agricultural Finance.* Kalyani, New Delhi: Ludhiana.

MODULE 2 FARM RECORDS AND ACCOUNT

UNIT 1 FARM RECORD KEEPING

CONTENTS

1.0 INTRODUCTION

One of the factors which distinguishes commercial farming from peasant farming is the deliberate efforts on the part of the farm / ranch operator to keep records and accounts of his farm/ranch operations. It is an undisputable fact that the backbone of any business organisation aiming at maximising profits is a well-organised system of records keeping and accounting. The need to keep records and accounts of farm business activities becomes increasingly necessary as agriculture moves from subsistence to market-oriented production.

Under peasant agriculture, the need to keep records and account hardly arises because farm production activities are geared primarily towards meeting subsistence needs of the farmer's family which invariably supplies the bulk of factors of production employed on the farm. However, under commercial agriculture, the need to keep written records and accounts become clearly manifest because farm business operation are undertaken with the motive to maximise profit by using a wide variety of resources which are traded in the market, since the farm operator has to deal with large volumes of financial transaction he cannot possibly rely on his memory for keeping farm records and accounts. For planning and decision-making purposes, he has to keep written records and accounts of all business undertaken on his farm.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the basic importance of keeping records
- identified the type of records we keep on the farm.

3.0 MAIN CONTENT

3.1 Importance of Keeping Farm Record

3.1.1 Farm Management Decision Making

The farm is usually faced with management decisions such as: What to produce? When and how much to produce? What combination of inputs to use; for whom to produce etc? in taking these decisions, farm records and accounts when kept for a length of time are a useful guide to the farmer in determining what each enterprise is adding to the farm income as well revealing where his relative advantage lies.

Apart from allowing the farmer to measure his efficiency in using resources such as land, labour and capital for producing agricultural products for sale, farm records enable him to check whether things are going wrong so that he can quickly put them right before they result in big losses. Another way in which farm records and accounts are very useful to farm management decisions lies in planning the organisation (re-organisation) of farm enterprises in advance.

An examination of a given farm records and accounts over a period of years provides a basis for formulating future plans (e.g. budgeting). Because of variations across different farms in terms of differences in management abilities, climatic conditions, soil types, availability of labour and credits etc, the data generated on a given farm will be much more reliable local averages for formulating such future plans.

3.1.2 Performance Evaluation

By proving a history of what is happening on the farm from one period to the other, farm records and accounts enable the farmer to determine whether he is making progress or not. By comparing any year's records and account with those of the other years, a farmer can see whether his yields and profits are increasing or decreasing.

Furthermore, he will be able to compare his achievements in terms of yields and profits with those in his plans as well as with those of similar farms in the neighbourhood. Such comparisons can lead to identifications of possible weaknesses and to ways of overcoming them. Farm records and accounts also enable the farmer to know his farm's financial position at a given time period. The knowledge of the extent of his liabilities in relation to possible returns is very important to avert financial loss and/or bankruptcy. By showing the farmer how much he is earning, farm records and accounts can make the farmer adjust his personal expenditures to the income arising from his farm business.

3.1.3 Credit Purpose

Good and accurate farm record-keeping and accounting provide an important basis for granting credit by financial institutions world-wide. According to the American Bankers Association (1965), the banker who has records of the borrower's business is able to compare the borrower's past performance against standards in the area. They pointed out that records also become a basis for projecting and evaluating the future profitability and loan repayment capacity of the business and that record properly and accurately kept, provide the banker with the financial information needed for prompt handling of credit requests.

A farmer who keeps proper records and accounts of his farm business and who wishes to negotiate with his bank or with any other financial institutions for a loan to expand his business is likely to be given a better audience than the one who has only a vague idea of the economic situation of his farm business. Thus, lack of accurate records and accounts by small farmers can make it difficult for bank to extend credit facilities to them. It is agreed that it is a dis-service to extend credit to a farmer who has no records and accounts to show that by using credit, he can make additional money to repay the loan as and when due and leave a profit for himself. Such a farmer thereby acquires a debt obligation without any concomitant increase in income with which to repay it while the lending institution is saddled with a recovery problem.

3.1.4 Taxation and Insurance Purposes

One of the civil responsibilities of an adult (including the farmer) is the payment of his tax which is one of the sources of revenue to the government. On the other hand, a farm insurance policy is an undertaken by a farmer to pay a premium (agreed sum of money) to an insurance company willing to undertake the risks of a possible loss on the insurance property and/or enterprises of a total loss on the insured item by receiving some compensation (indemnity) from the insurance company in the event of a loss or damage.

However, lack of reliable records and accounts does not permit accurate assessments of farmer's annual net farm incomes in Nigeria. The results, of course, are that some farmers are paying more taxes while many others are paying less taxes than the amounts they are liable.

3.1.5 Provision of National Agricultural and Economic Planning Data

There is no gain saying the fact that adequate and reliable data are essential for both agricultural and overall economic planning in any economy. For this purpose, farm records and accounts provide the much needed data for meaningful and attainable agricultural plans both at the local, state and national levels. For example, budgetary allocation of funds for the purchases of farm inputs, such as machinery and fertilizers, require knowledge of the demand for these inputs. However, to be able to estimate the demand for machinery and fertilizers data on the number of farmers, the level of their farm incomes, machinery hours employed, quantity of fertilizers used, hectares of land under different types of crops etc must be known. Thus, lack of adequate and accurate farm records and accounts explain why Nigeria has found it difficult to formulate workable agricultural and economic plans. Other areas where records and accounts could be useful to the farmer are in making leases or sales, assessing for compensation and in the settlement of an estate on the death of the farmer. Well kept farm record and account provide great assistances to value in determining the value of the business and compensation payable.

3.2 Types of Farm Record

There are a number of ways of categorising farm record and account. However the categories which a farmer adopt depend on the types of information he wants to keep. For our purpose, here, five types of record will be discussed. These include:

1 Inventory records

2 Production records
3 Farm receipts records
4 Payroll/labour records and
5 Farm operation records.

3.2.1 Inventory Records

An inventory refers to the complete count and evaluation of all assets and liabilities on the farm at a specified date. 'Assets' in this context refers to all materials i.e. goods and services owned by the farmer and used in the production process. Liabilities, on the other hand, refer to goods and services which the farm owes to others. An inventory record of a farm is important for a number of reasons. First, it shows the net worth of the farm at a point in time as well as the stocks such as feeds, medicines etc. Second, it records the expenses due to depreciation.

There are two steps in taking an inventory: first, there is a physical count of the assets and liabilities (physical records). This involves a simple listing of the assets and liabilities of the farm. The list could be in the form of land in hectares, including what crops are on what hectares, buildings and what the building are used for: fences and permanent improvements on land such as dams, terraces etc. other assets that should be listed include machinery and equipment such as tractors and their implements, cutlasses, hoes baskets etc; supplies such as chain, ropes, fertilizers, seeds, medicines as well as gasoline.

It is also necessary to take note of the stage of maturity of crops standing on the field as well as crops in stock (i.e. crops harvested but not yet sold) (and whether the crops are shelled or milled or processed to any form).

A physical count of livestock should include the type and class of livestock, the age, sex, as well as the number and weight, if possible. Normally animals are lumped together and the total or average weights taken, but valuable bulls, dairy cows and breeding stock should be listed individually.

The second step in taking an inventory is the valuation of the assets and liabilities already listed, using appropriate methods. Usually, inventory records are taken at the beginning and at the end of the year. As a rule, the same price must be used to value the assets and liabilities listed each time so that only real changes are accounted for. Changes in inventory values between the beginning and end of the year may be due to one or a combination of changes in market conditions.

Apart from being very useful in appraising a farm business, farm inventory records are useful in preparing the farm income statement, farm trading accounts and the farm balance sheet.

Assets could be classified into fixed, working and current assets while liabilities are usually classified into long-term, medium–term and current liabilities. The classifications are however, not foolproof as the decision as to which class to put a particular asset or liability depends to some degree on the farmer or farm manager. Nevertheless, there are some assets and liabilities that fit neatly into the classes. Fixed assets are those with a long life and which are practically impossible to convert to cash to meet short-term or current obligations. They include building, land, dairy cattle breeding, rock, etc.

Working assets are those which can within relatively short time be converted into cash; they include seeds, feeds, and supplies as livestock. Harvested crops in storage may also be classified as working assets. These assets are those that can be used immediately in production such as cash and account receivable. Other assets that can be easily converted to cash, such as milled rice or threshed maize are current assets.

Long term liabilities include: mortgages which take a long time to liquidate and other long time debts. Medium term liabilities refer to debts due for repayment say within 2-3 years. (Medium term liabilities include debts incurred on the basis of crops in the process of production or poultry and other livestock which will be ready for sale within the production seasons). They are debts incurred based on a medium term ability to repay). Current liabilities, are debts that are due for payment or that will be due for payment within a very short period.

3.2.2 Production Records

There are records of the payment of both crop and livestock output produced together with the corresponding quantities of inputs used. Examples are record of area of land under different crop. Quantities of inputs used and outputs harvested.

Livestock record should include number, age, weight and mortality as well as the quantities of feed of various types of livestock. In case of poultry enterprise, such record should include number of bird, quantities of feed fed, weights and number of eggs laid per day.

3.2.3 Farm Receipt Records

A profit oriented farmer should obtain receipts for all items purchased from his farm business and issue receipt for all items sold on the farm and keeps them religiously. In addition, he should properly document all accounts payable to others and receivables by his business. By doing these, he will be able to have an accurate picture of all expenditures and incomes of his farm business at the end of the year.

Finally, the farmer should include the value of the farm produce consumed by his household and / or given as gifts as part of the farm income. The naira value of farm produce consumed and / or given to others can be determined by using relevant market prices to value each output.

3.2.4 Payroll/Labour Records

These should contain information such as the category of workers employed, date, work done, number of days worked and wage rate including payment in kind. Other aspect of the labour record which should also be documented is the amount of labour input supplied by members of farm household, categorised into adults and children.

Such a record should contain the number, sex and number of days worked by household members during the year. The contributions of family labour (in monetary terms can be estimated by (a) estimating total man-days of family labour after making necessary adjustments to convert the work done by non-adult and female members of household to adult-equivalents and (b) multiplying total man-days obtained in (a) above by the current wage rate.

(a) Amount both physical and naira value of labour used each season of the year and
(b) Amount of labour used for each farm enterprise.

3.2.5 Farm Operation Records

Major farm operations on which proper records should be kept include land clearing and preparation, planting, weeding (manual, chemical or mechanical), fertilizer application, and harvesting. The records should show the number of man-days and / or machinery hours employed by each operation as well as the date operations were carried out. Also necessary for documentation in such records are the types of labour and machine for each operation.

4.0 CONCLUSION

We can conclude that keeping farm records enables a farmer to develop the farm as per the modern recommended requirements in order for the farm to be commercially viable. The farmer is able to gather important information concerning the farm which helps him to make important decisions on the future plans on the development of the farm.

5.0 SUMMARY

In this unit, we have learnt:

- the importance or roles of keeping farm records
- the types of farm records.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly discuss the importance of keeping farm records and account in farm business.
2. Identify and discuss major types of farm records and accounts in farm business.

7.0 REFERENCES/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics*. Ibadan: Impact Publishers Ltd.

Ogunbameru, B. O.; Aderinola, E. A. & Ume, U. A., (1988). Farm Records and Accounting Systems in Developing Economy. A paper presented at N.A.C. B Seminar on Agricultural Projects Planning and Appraisal, held in Kaduna 5th -16th Sept 1988.

Pius, B. Ngeze (2003). *How to keep farm Accounts*. Muthithi Road Nairobi' Kenya: Acacia Publishers.

UNIT 2 PRINCIPLES OF FARM ACCOUNTING

CONTENTS

1.0 INTRODUCTION

Farm accounting involves maintaining and using records and other information needed to measure the financial performance of the business. A farmer cannot possibly make intelligent decision regarding the current use of capital unless adequate information regarding the current financial condition and past progress of the operation is at hand.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the principles of keeping farm accounts
- explain the importance of keeping farm accounts.

3.0 MAIN CONTENT

3.1 The Basic Principles of Farm Accounting

There are some basic principles of farm accounting. These are:

3.1.1 Serviceability

Financial accounts are meant to serve the business and legal needs of the management of a business enterprise. Since the introduction of a new record or account involves additional expenses, a new record should be added only if it has a prospective benefit which is greater than the opportunity cost of introducing it.

3.1.2 Objectivity

Financial report should show facts which could be supported by concrete evidence of complete transactions, such as invoices, cheques, contracts etc. Also, such report should be unbiased and be verifiable by independent investigators such as auditors.

3.1.3 Materiality Principle

States that only assets which have some significance should be included in accounts i.e. assets which have a purchase price over some specified amount. For instance, while depreciation values on assets such as vehicles and equipments are included in the accounts, depreciation values on assets such as pencils and erasers are not because the amounts involved are very small compared with the opportunity cost of depreciating them. However, determining what is and what is not material to the accounts of a business is a matter of judgment.

3.1.4 Conservatism

Simply cautions against being over optimistic when values of assets, depreciation rates etc are being determined. When valuing assets for accounting purpose, the lowest of the three values i.e. historical cost, replacement cost or net realisable values of an asset unit is actually realised.

3.1.5 Disclosure

This requires that full supplementation of pure numerical recordings and tabulations with explanatory footnotes and comments be made.

3.1.6 The Going Concern

It is assumed that the business entity will continue its activity indefinitely. Thus, only the cost of assets paid by the entity is considered. The business will have continuous use of the assets for the purpose for which they were acquired. Any deviations from this will be completely identified and clearly explained.

3.1.7 Consistency

This states that the basis for valuing assets and fund for measuring profits should be consistent from one period to the other. This is necessary to make comparisons between the accounts of one year and another more meaningful one.

3.1.8 Cost as Basis of Valuation

This states that assets should be valued in a balance sheet at what they cost and not at what they worth if they were sold at going market value. Cost include incidentals such as transportation, installation etc. Where there are two alternatives for value such as in a trade fair or a gift, the price selected should be the more reliable estimate of the “fair” market price.

3.1.9 Duality Principle

This considers every business transaction as having a dual aspect i.e. “giving” and “receiving” which must be reflected in the accounts. For example when a business purchases an asset, it will be “giving” cash and “receiving” the asset.

This principle is fundamental to double-entry system of credits and debits which is the basis of most modern book-keeping.

3.1.10 Stable Monetary Units

This assumes that general price level remains reasonably constant. Since the primary purpose of accounting is measurement of income and business worth, there must be some stable measuring unit.

3.1.11 Realisation of Revenues

This states that revenues are realised when market place transactions increase the owner’s equity and should not be recorded unit that time.

4.0 CONCLUSION

In this unit, you have learnt the basic principles of farm accounting which guide us in the compilation of the financial records and valuations of assets.

5.0 SUMMARY

In this unit, we have learnt:

- the basic principles of farm accounting
- importance of each of these principles in the compilation of financial records such as the balance sheet, income statement or profit and loss statement.

6.0 TUTOR-MARKED ASSIGNMENT

Briefly discuss the basic principles of farm accounting.

7.0 REFERENCES/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics.* Ibadan: Impact Publishers Ltd.

Ogunbameru, B. O., Aderinola E. A. & Ume U. A. (1988). "Farm Records and Accounting System in Developing Economy." A paper presented at Nigerian planning and appraisal, held in Kaduna between 5th -16th Sept. 1988.

UNIT 3 PREPARATION OF FINANCIAL STATEMENTS

CONTENTS

1.0 INTRODUCTION

Financial analysis involves maintaining and using records and other information needed to measure the financial performance of the business. A farmer cannot possibly make intelligent decision regarding the current use of capital unless adequate information regarding the current financial condition and past progress of the operation is at hand.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- prepare a balance sheet
- prepare a profit and loss account.

3.0 MAIN CONTENT

3.1 Preparation of Profit and Loss Account

The income statement otherwise called profit and loss account provides a measure of return from the business or the ability to meet financial obligations such as debt payments, rent, payroll and other expense during the year. Thus, the income statement reveals the success or failure of a farm business over time, as well as the costs and returns associated with the used of varying amount of capital and credit. Preparation and analysis of an income statement for a typical farm business can be accomplished using a single entry accounting system that lists the receipts and expenditures in general categories.

A Hypothetical Profit & Loss Account for a Mixed Farm

EXPENDITURE ITEMS	**RECEIPTS VALUE (N)**	**(INCOME) ITEMS VALUE (N)**	
Operating Expenses		Crops sales	
Machinery and equipment		Rice	
	5,000		
Upkeep	400	Maize	
	3,000		
Hired labour	2,200	Yam	
	2,000		
Fertilizers	650	Beans	
	2,500		
Seeds and planting		other crops	
	1,200		
Materials bought	1,000	Total crop sales	
	13,700		
Livestock feed bough	1300	Livestock sales	
Medicine bought	200	Cattle	-
Supplies bought	50	Milk	
	1,500		
Total operating Expenses	5,800	Poultry (chicken)	
	1,600		
Fixed Expenses		Eggs	
	2,200		
Interest payments	-	Total livestock sales	
	5,300		
Insurance payments	500	Receipts from hired-out	
Totals cash Expenses	6300	Machinery	
	500		
Gross cash income	19,500		
	NET CASH INCOME = N13,200		
Net depreciation of equipment	2,500	Products for home consumption and gifts	
Net depreciation of			
	1800		
Permanent improvements	1,400	Increase in inventory	
500			
Decreases in inventory	2,300		
Value of family labour	1,300		
Total Expenditure	13,800	Total Income	21,800
	NET FARM INCOME N8,000		

3.2 Preparation of Balance Sheet

The balance sheet, otherwise known as a networth statement is a summary of assets and abilities of the business together with a statement of the owner's equity or net worth. Its primary function is to measure risk bearing ability or financial solvency i.e. it shows the margin by which debt obligations would be covered if the business was terminated and all assets sold. The balance sheet indicates the financial structure of the business i.e. liabilities must be repaid within the current year, liquid asset available for sale to pay current obligations and longer-term obligations and assets. The structure of the balance sheet is obtained from the basic accounting equation:

Assets = Liabilities + Owner's equity
The balance sheet is always divided into three parts:

i. The assets or value of things owned
ii. The debt owed (liabilities) and
iii. The difference between items (i) and (ii) which is owner's equity. This last item makes the statement balance.

A Hypothetical Balance Sheet for a Mixed Farm

ASSETS (N) ITEM		**LIABILITIES ITEMS**	**VALUE**
		VALUE (N)	
Current Asset		Current Liabilities	
Cash in hand	500	Debt due for payment	500
Stock for sale	1,500	Medium term liabilities	
Account receivables	1200	Debts due for payment	
Working Assets		a year to two	
	12000		
Feed in stock	500	**Long term liabilities**	
Supplies	200	Mortgage	5000
Harvested crops	9000	Debts due for payment	
Fixed assets		in a long term	20,000
Land (including crops	3,000	Total liabilities	
	37,500		
On land)			
Buildings	10,000	Net worth	18,400
Machinery and			
Equipment	15,000		
Dairy cows and			
Breeding stock	15,000		
Total assets	55,900		

4.0 CONCLUSION

You have learnt in this unit that financial records enable us to measure returns from the business and gives us the ability to meet financial obligations. It also enables us to measure risk bearing ability or financial solvency of the business.

5.0 SUMMARY

In this unit, you have learnt:

- how to prepare profit and loss statement otherwise referred to as income statement
- how to prepare a balance sheet
- the uses of profit and loss statement in a business enterprise
- the uses of balance sheet in a business enterprise.

6.0 TUTOR-MARKED ASSIGNMENT

1. Differentiate between profit and loss account and balance sheet.
2. Prepare a hypothetical profit and loss account for a small scale mixed farm.
3. Prepare a hypothetical balance sheet for a small scale mixed farm.

7.0 REFERENCES/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics.* Ibadan: Impact Publishers Ltd.

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UNIT 4 BUDGETING

CONTENTS

1.0 INTRODUCTION

Budgeting may be defined as the detailed quantitative statement of a farm plan or a change in farm plan, and the forecast of its financial result. It sets out (a) the physical aspects of the plan: what to produce, how much and the resources needed, and (b) the financial aspects of plan, the excepted costs and returns and therefore, profit. The term 'farm budget' is often used, however, solely, in regard to (b).

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what budgeting as a farm tool is all about
- identify the various types of budgeting as a farm planning technique.

3.0 MAIN CONTENT

3.1 Complete Budgeting

Complete budgeting relates to the entire farm plan; thus all the physical data are included and all cost and receipt items have to be calculated.

Complete budgeting as used when a plan for a 'new farm' or 'new' farmer is required. It may also be used where a major change in an existing farm is being considered-one which will affect most, perhaps all of the cost and receipt items on the farm.

3.2 Partial Budgeting

Partial budgeting has been described as a rough form of marginal analysis, i.e.it looks at the changes that will occur in costs as a result of a (marginal) change in the farm plan.

There are three main types of changes.

3.2.1 Product Substitution

Here, one enterprise is substituted for another e.g. potatoes for sugar beet. Whenever a land-using enterprise is introduced, discarded or changed in size, these types of substitution is usually involved.

3.2.2 Change of Enterprises without Substitution

This may occur when non-land-using enterprises such as pigs or poultry are introduced or expanded or reduced or where the stocking rate of an existing area of grassland is altered.

3.2.3 Factor Substitutions

Here, factor ‘is used in the widest sense of the word. Often a change in production technique is involved. For example, buying machine instead of hiring a contractor, changing from hand harvesting to machine harvesting of a crop, adding fertilizer to grass and increasing the stocking rate, buying hay instead of making it on the farm.

Four question are asked in a partial budget, two of which relate to the financial losses arising from the contemplated change (i.e. the debit side) and two of which relate to the consequential financial gains (i.e. the credit side).

A (Debit)
What loss of (present) revenue occurs?
What extra (new) costs are incurred?

A (Credit)
What extra (New) revenue is obtained?
What (present) costs are no longer incurred?

3.3 Break-even Budgeting

This can be employed to estimate the yield required to provide an exact balance of changes in costs and revenues so that the farmer is neither better nor worse off. It may be a case where the farmer is considering buying a new machine but is not quite certain what benefits he would obtains by so doing. A break-even budget will then show the level of benefits needed to cover the extra cost in investing on the new machine.

3.4 Weakness of Budgeting as a Planning Tool

- Budgeting assumes linear relationship and hence ignores diminishing returns and complementary relationship between enterprises.
- There is also the problem of estimating yield and prices especially in the cases of new farmer or those beginning new enterprises.
- Budgeting can be criticised as being an inefficient technique if a profit-maximising plan is being sought. Many budgets may be needed before a high profit plan is obtained and still there would be no certainty that substantially more profitable plans did not exist.

4.0 CONCLUSION

In this unit you have learnt that budgeting is one of the most widely used methods of farm planning. In some ways, however, it is better described as an aid to, rather than a method of farm planning. In budgeting, a farm plan is drawn up using a combination of experience, judgment and intuition; the process of budgeting itself is used only in evaluating the farm plan in financial terms.

5.0 SUMMARY

In this unit, you have learnt:

- the various types of budgeting as a farm planning tool
- the weaknesses of budgeting as a farm planning tool.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly discuss three types of budgeting as a farm planning tool.
2. Briefly discuss the criticisms of budgeting as a farm planning tool.

7.0 REFERENCES/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics*. Ibadan: Impact Publishers.

Barnard, C. S. & Nix, I. S. (1978). *Farm Planning and Control*. Cambridge University Press.

UNIT 5 FINANCIAL CONTROL/APPROACHES TO EFFICIENT CREDIT MANAGEMENT

CONTENTS

1.0 INTRODUCTION

It is difficult and perhaps even a little foolhardy, for one to try to distinguish between farm management, farm records and accounting and financial management of a farm business. It is nevertheless still necessary to emphasize the financial aspects of overall farm management. Farm financial management refers to management of the farm's capital resources. A farm's capital resources could be categorised into fixed capital (or assets), working capital (asset) and current capital (asset). Prudent management of capital resources on a farm is a major determinant of the success of the farm. The failure of many government owned agricultural enterprises in Nigeria and elsewhere can be traced to poor financial management of the enterprises.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify some methods of financial control
- discuss how scarce capital resources are efficiently managed to enhance profile making on the farm.

3.0 MAIN CONTENT

3.1 Annual Budgetary Appraisal

The broadest type of performance check is to compare the actual financial results achieved with a budget forecast. This consists merely of putting budgeted and actual results alongside one another and calculating the differences. Simple and crude as this may be, it is better than nothing. Where the profit is above or below the expected level, the comparison gives a rough idea of why. Even if the profit is close to the budgeted figure it may be because favourable differences have approximately cancelled out unfavourable differences. It is extremely important to know this, because favourable features should be examined to see whether they can further be exploited in the future and unfavorable features must be studied to see whether they can henceforth be avoided.

3.2 Whole Farm Budgetary Control

By the time the end-of-year budgetary can be carried out it is certainly too late to correct some of the damages that might have been done by taking wrong decisions during that financial year. How much too late it is, depends to some extent on how quickly the annual accounts are completed, but even if they are available almost immediately after the end of the financial year, it will still be too late in indicating some perhaps crucial decision that ought to have been taken.

Despite its lateness, however, the procedure is still of value, partly as has already been argued because of the financial picture of the business and its most important elements that is build up, also because some useful actions, as regards future cropping and stocking for example, can still be taken in the future as a result of the analysis. For the financial appraisal to be fully worthy of the name ‘control’, however, it should be carried out more frequently, that is, either monthly or at least quarterly. It will then be possible to check discrepancies earlier and to take action accordingly as required.

4.0 CONCLUSION

Until recently controlling the business was a neglected aspect of farm management. Yet many would argue that is the most important part. It rather depends on how broadly the term ‘control’ is interpreted. At one extreme, it might be thought of in terms of a single procedure. The annual checking of actual result against a budget forecast; on the other hand might justifiably by held to cover every aspect of administrating the farm business.

5.0 SUMMARY

In the unit, you have learnt:

- some methods of financial control in farm business
- some importance of financial control in achieving a profit making goal of a commercial farmer.

6.0 TUTOR-MARKED ASSIGNMENT

1. Identify at least two approaches of efficient financial management on a commercial farm.
2. Briefly discuss at least two methods of financial control on a commercial farm.

7.0 REFERENCES/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economic.* Ibadan:Impact Publishers.

Barnard, C. S. & Nix, J. S. (1978). *Farm Planning and Control*. Cambridge University Press.

MODULE 3 MARKETING

UNIT 1 MARKETING FUNCTIONS

CONTENTS

1.0 INTRODUCTION

Market in the ordinary language means a place where buyers and sellers meet to transact business i.e. physical market e.g. Oja Oba, Isinkan markets etc. Such markets abound in many cities and villages in West Africa. The regularity of holding such markets varies widely. Some are held daily, some weekly, others at some periodic intervals such as once in every five or nine days.

However, in the real sense, a market may be defined as an institution where the exchange of goods and services takes place i.e. it is the interaction of the forces of demand and supply. Marketing on the other hand is the sum total of all business activities involved in the movement of commodities from production to consumption. This definition is applicable to the marketing of industrial goods as well as to that of agricultural commodities.

Marketing system has two distinct dimensions. One of those dimensions is the institutions, organisations and enterprise which participated in a market and the second is the functions that those participants perform. The institutions of marketing are those individuals and business organisations who perform the various marketing function. Marketing functions are the major specialised activities performed in the marketing system.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the meaning and scope of marketing
- identify the various marketing functions.

3.0 MAIN CONTENT

3.1 Exchange Functions

These are those activities involved in the transfer of goods i.e. buying and selling activities which form the heart of marketing. They mark the point at which prices are set and transfer of title of goods takes place.

3.1.1 Buying

The buying function involves seeking out the sources of supply, assembly and all activities connected with purchase.

3.1.2 Selling

The selling function is more that passively accepting the prices offered. It embraces all that is called merchandising. It involves all decisions on the unit of sale, the best channel of distribution, advertising and all promotional activities.

3.2 Physical Functions

These are those activities that involve handing, movement and physical change (i.e. processing) of the actual commodity.

3.2.1 Storage Function

This function is concerned with the holding of goods and making them available at the desired time. It may be concerned with the activities of elevators in holding large quantities of raw materials until they are needed for further processing. It may be the holding of supply of finished goods as the inventories to processors, wholesalers and retailers.

3.2.2 Transportation Function

The transport function is chiefly one of making the product available where it is needed without adding unreasonably to the overall cost of the produce. Adequate performance of this function requires consideration of alternative routes and types of transportation with a view to achieving timeliness, maintaining produce quality and minimising costs.

3.2.3 Processing

Most agricultural produce is not in a form suitable for direct delivery to the consumer when it is first harvested. Rather it needs to be changed in some way before it can be used. The form changing activity is one that adds value to the product.

For example, changing green coffee beans into roasted beans, cassava into garri or livestock feed, ripe fruit bunches into palm oil etc. increases the value of the product because the converted product has greater utility to buyers. How the produce is to be changed and the methods to be used in bringing about such changes are marketing decisions.

3.3 Facilitating Functions

The facilitating functions include product standardisation, financing, risk bearing and market intelligence. Facilitating functions are those activities, which enable the exchange process to take place. Facilitating functions are not a direct part of either the exchange of title or the physical movement of produce.

3.3.1 Standardisation

Standardisation is concerned with the establishment and maintenance of uniform measurements of produce quality and/or quantity. This function simplifies buying and selling as well as reducing marketing costs by enabling buyers to specify precisely what they want and suppliers to communicate what they are able and willing to supply with respect to both quantity and quality of product. In the absence of standard weights and measures, trade either becomes more expensive to conduct or impossible altogether. Among the most notable advantages of uniform standards are:

- Price quotations are more meaningful
- The sale of commodities by sample or description becomes possible.
- Small lots of commodities, produced by a large number of small producers, can be assembled into economic load if these supplies are similar in grade or quality.

3.3.2 Financing

In almost any production system, there are inevitable lags between investing in the necessary raw materials (e.g. machinery, seeds, fertilizers, packaging, flavourings, stocks etc.) and receiving the payment for the sale of produce. During these lag periods, some individuals or institution must finance the investment. The question of where the funding of the investment is to come from, at all points between production and consumption is one that marketing must address.

Consider the problem of a food manufacturer who wishes to launch a range of chilled products in a developing country where few retail outlets have the necessary refrigeration equipment. This is a marketing problem, which might be solved by the food manufacturer buying refrigerators and lending these to retailers (or arriving at a hire-purchase arrangement with retailers). Marketing is also concerned with the financing of the enterprise itself. Here, again, some creative solutions can be developed. Where internal financing is sufficient for the purposes in view, an enterprise in a developing country can look to several alternatives including; development banks, commercial banks, share issues and credit cooperatives.

3.3.3 Risk Bearing

In both the production and marketing of produce, the possibility of incurring losses is always present. Physical risks include the destruction or deterioration of the produce through fire, excessive heat or cold, pests, floods, earthquakes etc. Market risks are those of adverse changes in the value of the produce between the processes of production and consumption.

A change in consumer taste can reduce the attractiveness of the produce and is therefore, also a risk. All of these risks are borne by those organisation, companies and individuals.

3.3.4 Market Intelligence

As far as possible, marketing decision should be based on sound information. The process of collecting, interpreting and disseminating information relevant to marketing decisions is known as market intelligence. The role of market intelligence is to reduce the level of risk in decision-making.
Through market intelligence, the sellers find out what the customer needs and wants. The alternative is to find out through sales or the lack of them. Marketing research helps establish what products are right for the market, which channels of distribution are most appropriate, how best to promote products and what prices are acceptable to the marketers.

4.0 CONCLUSION

In this unit, you have learnt that market is not just a place where buyers and sellers meet to buy and sell but any arrangement whereby buyers and sellers are in close touch with one another for the purpose of business transaction either by telephone or postal system.

You also learnt the various marketing functions involved in carrying out marketing activities of either industrial or agricultural products.

5.0 SUMMARY

In this unit, you have learnt the:

- concept of market and marketing
- various functions performed in marketing activities of industrial or agricultural products.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define the concepts of market and marketing as regard industrial or agricultural products.
2. Briefly discuss the major functions performed in the marketing of industrial or agricultural products.

7.0 REFERENCES/FURTHER READING

Adekanye, T. O. (1988). *Readings in Agricultural Marketing*. Longman Nigeria Ltd.

Crawford, I. M. (2001). Agricultural and food Marketing Management. http://www.fao.org/DOCREP/004/W3240E/W324E00HTM

UNIT 2 TYPES OF MARKET

CONTENTS

1.0 INTRODUCTION

There are different ways of classifying markets. They may be classified on the basis of competition, their levels in the chain of distribution etc.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identity the types of markets
- distinguish markets based on their unique characteristics.

3.0 MAIN CONTENT

3.1 Perfect Competition

Perfect competition is a market structure characterised by a complete absence of rivalry among the individual firms. Perfect competition is based on the following assumption.

- **Large Number of Sellers and Buyers**

The industry or market includes a large number of firms (and buyers), so that each individual firms, however large, supplies only a small part of the total quantity offered in the market.

- **Product Homogeneity**

The industry is defined as a group of firms producing a homogeneous product. The technical characteristics of the product as well as the services associated with its sale and delivery are identical. There is no way in which a buyer could differentiate among the products of different firms.

- **Free Entry and Exit of Firms**

There is no barrier to entry or exit from the industry. Entry or exit may take time, but firms have freedom of movement in and out of the industry.

- **Profit Maximisation**

The goal of all firms is profit maximisation. No other goals are pursued.

- **No Government Regulation**

There is no government intervention in the market (tariffs, subsidies, rationing of production or demand and so on are rule out).

- **Perfect Mobility of Factors of Production**

The factors of production are free to move from one firm to another throughout the economy. It is assumed that workers can move between different jobs; which implies that skills can be learnt easily. Finally, raw materials and other factors are not monopolised and labour is not unionised.

- **Perfect Knowledge**

It is assumed that all sellers and buyers have complete knowledge of the conditions of the market. This knowledge refers not only to the prevailing conditions in the current period but in all future periods as well. Information is free and costless.

3.2 Monopoly

Monopoly is a market structure in which there is a single seller, there are no close substitutes for the commodity it produces and there are barriers to entry.

The main causes that lead to monopoly are the following:

- ownership of strategic raw materials or exclusive knowledge of production techniques
- patent rights for a product or for a production process

- government licensing or the imposition of foreign trade barriers to exclude foreign competitions
- the size of the market may be such as not to support more than one plant of optimal size
- the existing firm adopts a limit-pricing, that is, a pricing policy aiming at the prevention of new entry. Such a pricing policy may be combined with other polices such as heavy advertising or continuous product differentiation which render entry unattractive.

3.3 Monopolistic Competition

The basic assumptions of this market are as follows:

- there are large number of sellers and buyers in the ‘group’
- the products of the sellers are differentiated, yet they are close substitutes of one another.
- there is free entry and exit of firms in the group.
- the goal of a firm is profit maximisation, both in the short run and in the long run.
- the prices of factors and technology are given
- the firm is assumed to behave as if it knew its demand and cost curves with certainty
- The log run consists of a number of identical short-run periods, which are assumed to be independent of one another in the sense that decisions in one period do not affect future periods and are affected by past actions.

3.4 Oligopoly

Oligopoly exists when there are more than one seller in the market, but the number of sellers is sufficiently small such that the action of one has some perceptible effects on other firms. Because the number of firms are small, all firms are interdependent and the policy of one firm directly affects others. There is therefore no impersonal competition like perfect competition but there is rivalry among the firms.
Basic assumptions under oligopolistic market can be itemised as follows:

- products are homogeneous
- the oligopolist firm purchases their inputs in perfectly competitive market
- firms take their decisions independently but their actions have interdependent effect.

4.0 CONCLUSION

In this unit you have learnt a list of suitable criteria for defining market situation, optimising social welfare and maximising the efficiency of the market.

5.0 SUMMARY

In this unit, we have learnt:

- the types of market
- the unique features or characteristics of these markets.

6.0 TUTOR-MARKED ASSIGNMENT

Write a short note on the following types of markets:

(a) Perfect Competition (b) Monopoly
(c) Monopolistic Competition (d) Oligopoly

7.0 REFERENCE/FURTHER READING

Koutsoyiannis, A. (1979). *Modern Microeconomics*. Macmillan Press Ltd.

UNIT 3 THE ROLES OF MARKETING IN AN AGRICULTURAL BUSINESS

CONTENTS

1.0 INTRODUCTION

Marketing is an extremely important form of human endeavour, that is, it is important in terms of ability to influence our life. Marketing plays a significant role in determining the type and number of products and services that we buy, where and when we buy them. Marketing is one of the few fields of enterprises that are effectively opened to the individuals with limited amount of capital investment.

2.0 OBJECTIVES

At the end of this unit, you should be able to;

- list the importance of marketing in general
- identify the roles of marketing in agricultural business in particular.

3.0 MAIN CONTENT

3.1 Importance of Marketing

- Since marketing involves the movement of goods from the producers to the consumers, the existence of a market is a fundamental need for increased output.
- Marketing stimulates processes, which rest on specialisation, which can be institutional or regional.

3.2 Importance of Marketing in Agricultural Business

- Agricultural marketing is an indicator of consumer preferences through the prices they are prepared to pay. These in turn affects the production decisions of farmers as they are most likely to produce crops and livestock which have high demand. It also ensures that the right types of crops are produced and these in effect would ensure that agricultural resources are used to the best advantage.
- Marketing becomes very important for countries whose products are export-oriented since earnings from such exports are used to finance development programmes.
- The more the goods available for marketing, the more the people employed in their marketing and hence the higher the increase in employment. This will invariably lead to rise in the standard of living, which will consequently add to the wealth of the community.
- Any expansion in the volume of trade occasioned by improved marketing will create for the government further incentives to provide such infrastructures like roads, water, storage facilities etc which will further enhance marketing efficiency.
- Agricultural marketing stimulate research into the techniques of food and meat preservation and the preparation of various food items to meet the different tastes of the population.
- Efficient marketing ensure that supplies of goods that are seasonal become available throughout the year with little variation in prices that can be attributed to the cost of storage. In this situation, both producers will be sure of selling all they can produce while the consumers are such to get all they want throughout the year.

4.0 CONCLUSION

In this unit have been exposed to the importance of agricultural marketing and without exaggeration, we can affirm that efficient marketing is one of the greatest stimulants of the national economy, as in its efficient state, it ensures a reasonable allocation of the nation’s resources.

5.0 SUMMARY

This unit has acquainted you with:

- the importance of marketing to the nation
- the roles of marketing to the survival of agriculture and the national economy in general.

6.0 TUTOR-MARKED ASSIGNMENT

Briefly discuss the significant of marketing to the agricultural business sector of the economy.

7.0 REFERENCE/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics*. Impact Publishers Nig. Ltd.

MODULE 4 AGRICULTURAL DEMAND AND SUPPLY PATTERN ANALYSIS

UNIT 1 PROBLEMS OF AGRICULTURAL MARKETING

CONTENTS

1.0 INTRODUCTION

In improving the marketing system for food and livestock in developing countries, it is pertinent to understand the nature of marketing problems as it is only by doing this that workable solution can be found.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- discuss some problems of agriculture marketing
- list some characteristics of agricultural products.

3.0 MAIN CONTENT

3.1 Some Problems of Agriculture Marketing

3.1.1 Source of Supply

Commodities are produced on small-sized farms scattered throughout the country. It is not an easy task organising how the goods can be assembled for efficient marketing.

3.1.2 Lack of Transport Facilities

This problem has many dimensions. In some cases, there are insufficient vehicle to carry goods from the farms to the rural markets to the towns. In other cases, transport accounts for a large proportion of marketing costs. In some instances, there are no roads or where they exist, they might be seasonal. Feeder roads are usually few and, in most cases, have to be constructed and maintained by communal efforts.

3.1.3 Lack of Efficient Handling, Packaging and Processing Facilities

Marketing problems can be compounded if there are no handling, packaging and processing facilities. For instance, if there are no processing facilities for crops like tomatoes, which are highly perishable, it means all the harvested crops must be sold within a given time. But due to packaging problems, quite a substantial part of the produce may be lost before getting to the market.

3.1.4 Inadequate Storage and Warehousing Facilities

Most market lack storage facilities and warehousing facilities and the amount of wastage that occurs due to the lack of these facilities often accounts for increasing cost of marketing and hence higher retail prices.

3.1.5 Lack of Uniform Weights and Measures

In most markets, different types of measures are used. These range from bags to cigarette tins. Weights are rarely used in marketing of food and livestock products. Pricing is usually by haggling and the prices paid depend upon the bargaining power of the buyers. Sometimes buyers pay prices according to their assumed social status. When weights are used they are usually debased or tampered with.

3.1.6 Adulteration of Produce

In some cases, inferior commodities are mixed with superior ones and are sold as superior commodities. This is possible since there are no grades and there are no quality control measures.

3.1.7 Growth or Urban Centres

The growth of urban centres creates more marketing problems. Concerned with inadequate supply to meet the increase in size; the need to create new market; storage and even packing problems for prospective buyers who own cars.

3.1.8 Instability of Prices

Prices are often manipulated by speculators with adverse effects on produces and consumers. There is too much seasonal variation in prices due mainly to lack of storage facilities and insufficient supply.

3.1.9 Inadequate Research on Marketing

Until recently, all efforts have been geared towards producing more without thinking about how to market them. There is need to know about new technologies in food storage and preservation. There is also the need for research on consumer demands and preferences, handlings and packaging.

3.1.10 Lack of Information about Production and Marketing

Some marketing problems can be traced to lack of information about production. For instances, sellers may not be able to identify sources of supply of commodities while producers may curtail their production as a result of poor sales. There must therefore be an information system where buyers and sellers can be aware of each other's problems.

4.0 CONCLUSION

You have learnt in this unit that agricultural marketing is unique due to the various problems of agriculture such as unstable supply, perishability of agricultural products to mention a few.

5.0 SUMMARY

- We have learnt in this unit that:the nature of agricultural products dictates the type of problems encountered in its marketing process.
- agricultural product has certain characteristics such as seasonality, perishability etc.

6.0 TUTOR-MARKED ASSIGNMENT

Briefly discuss some problems of agricultural marketing in your country.

7.0 REFERENCE/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics.* Ibadan: Impact Publishers.

UNIT 2 AGRICULTURAL DEMAND PATTERN ANALYSIS

CONTENTS

1.0 INTRODUCTION

Demand can be defined as a schedule of the amount of goods or services that buyers are willing and able to buy at a particular price over a given period of time. The study of demand is aimed at describing the behaviour of consumers.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify some factors that influence the demand for a particular good
- name the types of elasticity of demand
- explain some determinants of income elasticity of demand
- identify some of price elasticity of demand.

3.0 MAIN CONTENT

We can distinguish between two types of demand i.e. individual demand and a market or aggregate demand. An individual demand is a schedule of the amounts of a commodity, which a person (i.e. an individual) would buy at various possible alternative prices within a particular interval of time. The market demand for a given commodity is the horizontal summation of the demands of the individual consumers. In other words, the quantity demanded in the market at each price is the sum of the individual demand of all consumers at that price.

3.1 The Law of Demand

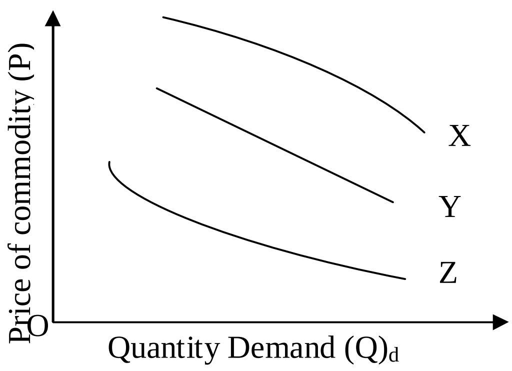
The law of demand states that the prices and quantities demanded of a commodity are inversely related ceteris paribus (i.e. all things remaining equal). In other words, the quantity demanded of a commodity decreases as the price of the commodity increases.

In mathematical language, this can be expressed thus;

$$Q_d \propto \frac{1}{P}$$

Which means that quantity demanded (Q_d) of a commodity is inversely related to price (P)

Diagrammatically, the law of demand is given below



A graph, representing the law of demand could therefore take any of the shapes X, Y, or Z. The common characteristics of the three graphs is their negative slopes

3.2 Determinants of Demand

Some of the factors that may influence the demand for a particular commodity can be discussed as follows:

1. **Price of the Commodity:** Increase in price will result in a decrease in quantity demanded of the commodity and vice-versa.

2. **Price of substitutes:** An increase in the prices of substitutes will result in an increase in the demand for the commodity. Similarly, a fall in the prices of substitutes will lead to a fall in the demand

for the commodity which is directly related to the prices of substitutes.

3. **Income of Consumer:** For a normal good (and most goods are normal) an increase in income of consumers will increase the demand for the good (commodity). Thus, the quantity demanded of a commodity is also directly related to income, ceteris paribus.

4. **Advertisement:** If the advertisement for a commodity is attractive and effective, more of the commodity will be bought. On the other hand, if the advertisement is not attractive and ineffective, less of the commodity will be bought.
5. **Taste and Fashion:** When more consumers prefer a particular new fashion or commodity, the demand for such commodity or fashion increases. When more consumers dislike a commodity due (perhaps) to the introduction of a new substitute, there may be a fall in the demand for the old commodity irrespective of its price.

3.3 Elasticities of Demand

The elasticity of demand can be defined as the degree of responsiveness of the demand for a good, to a change in the various factors that affect demand. There are as many elasticities of demand as its determinants. The most important of these elasticities are (a) the price elasticity (b) the income elasticity (c) the cross – elasticity of demand.

3.3.1 The Price Elasticity of Demand

The price elasticity is a measure of the responsiveness of demand to changes in the commodity's own price. If the changes in price are very small, we use as a measure of the responsiveness of demand the point elasticity of demand. If the changes in price are not small, we use the arc elasticity of demand. The point elasticity is defined as the proportionate change in the quantity demanded resulting from a very small proportionate change in price. Symbolically, it can be written as:

$$ep = \frac{dQ}{Q} \Big/ \frac{dQ}{P} \quad \text{or} \quad ep = \frac{dQ}{dP} \cdot \frac{P}{Q}$$

The arc elasticity is a measure of the average elasticity, that is, the elasticity at the mid-point of the chord that connects the two points (A and B) on the demand curve defined by the initial and the new price levels. Symbolically, arc elasticity can be represented as below.

$$\text{Arc elasticity} = \frac{OQ_2 - OQ_1}{OO_1} \div \frac{OP_2}{OP_2 - OP_1}$$

$$= \frac{OQ_2 - OQ_1}{OP_2 - OP_1} \times \frac{OP_2}{OQ}$$

3.2.1.1 Types of Price Elasticity of Demand

The prices elasticity of demand at any one point in a demand curve can be one of five types

i. Unitary Elasticity: If the relative change in the price of a commodity results in the same relative change in quantity demanded, then we have a case of unitary elasticity

   $ep = 1$

ii. Perfectly Elastic Demand: If a relative change (increase in price of the commodity results in an infinite change (decrease) in quantity demanded, then the elasticity is said to be infinite

   $ep = -\infty$

iii. Perfectly Inelastic: If a relative change in price of the commodity results in no change at all in quantity demanded of the commodity

   $ep = O$

iv. Relatively Elastic Demand: If a relative change (increase) in price leads to a more than proportionate change (decrease) in quantity demand

   $ep = -\infty$ < Relative elasticity < - 1

v. Relatively Inelastic Demand: This is the case where a relative change in price results in a less than proportionate change in quantity demanded

   $Ep = -1$ < Relative inelastic < O

3.3.1.2 Determinants of Price Elasticity of Demand

The basic determinants of the elasticity of demand of a commodity with respect to its own price are:

i. The availability of substitutes: the demand for a commodity is more elastic if there are close substitutes for it.
ii. The nature of the need that the commodity satisfies: In general, luxury goods are price elastic while necessities are price inelastic.
iii. The time period: Demand is more elastic in the long run.
iv. The number of uses to which a commodity can be put: The more the possible uses of a commodity the greater its price elasticity will be.
v. The proportion of income spent on the particular commodity.

3.3.2 Income Elasticity of Demand

The income elasticity is defined as the proportionate change in the quantity demanded resulting from a proportionate change in income.

It can be symbolically written as

$$e_y = \frac{dQ}{Q} \Big/ \frac{dY}{Y} = \frac{dQ}{dY} \frac{Y}{Q}$$

The income elasticity is positive for normal goods. A commodity is considered to be a 'luxury' if its income elasticity is greater than unity. A commodity is a 'necessity' if its income elasticity is small (less than unity).

3.3.2.1 Determinants of Income Elasticity

The main determinants of income elasticity are:

1. The nature of the need that the commodity covers; the percentage of income spent on food declines as income increases.
2. The initial level of income of a country
3. The time period, because consumption patterns adjust with a time-lag to changes in income.

3.3.3 The Cross – Elasticity of Demand

The cross-elasticity of demand is defined as the proportionate change in the quantity demanded of x resulting from a proportionate change in the price of y symbolically, we have

$$e_{xy} = \frac{dQ_x}{Q_x} \Big/ \frac{dP_y}{P_y} = \frac{dQ_x}{dP_y} \cdot \frac{P_y}{Q_x}$$

The sign of the cross-elasticity is negative if x and y are complementary goods and positive if x and y are substitutes. The higher the value of the cross-elasticity, the stronger will be the degree of substitutability or complementary of x and y.

The main determinant of the cross-elasticity is the nature of the commodities relative to their uses. If two commodities can satisfy equally well the same need, the cross-elasticity is high, and vice-versa.

4.0 CONCLUSION

In this unit you have learnt that demand is not synonymous with 'wish' or' want'. A demand must be backed by money or an ability to buy while a wish need not be. Apart from this, you have also learnt that the price of a commodity is not the only factor that influences the demand for a commodity.

5.0 SUMMARY

In this unit, we have been exposed to:

- some factors that influence demand for a commodity
- identification of types of elasticities of demand
- determinants of price elasticity of demand.
- determinants of income elasticity of demand.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly discuss some factors affecting demand for a particular commodity.
2. Identify the types of elasticities of demand you have studied.
3. Briefly discuss major determinants of price elasticity of demand.
4. Briefly discuss the major determinants of income elasticity.

7.0 REFERENCES/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics.* Ibadan: Impact Publishers, Ltd.

Koutsoyiannis, A. (1979). *Modern Microeconomics*. London: Macmillan Press Ltd.

UNIT 3 AGRICULTURAL SUPPLY PATTERN ANALYSIS

CONTENTS

1.0 INTRODUCTION

The supply of a commodity is the amount of the commodity which the producer is willing and able to offer for sale at a given set of prices during some specified period of time. It should be noted that supply is not the same as the total amount of goods produced. It is that fraction of total output that is made available for sale.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- discuss some determinants of supply of a commodity
- explain the types of price elasticity of supply
- list the determinants of the price elasticity of supply.

3.0 MAIN CONTENT

We can distinguish between two types of supply i.e. an individual and a market or aggregate supply. An individual supply is a schedule of the amount of goods or commodity that a person (i.e. an individual) would be willing and able to offer for sale at a particular price over a given period of time. A market or aggregate or total supply is the schedule of the amount of goods or commodity that all producers or sellers are willing and able to make available for sale in the market at various alternative prices over a given period of time.

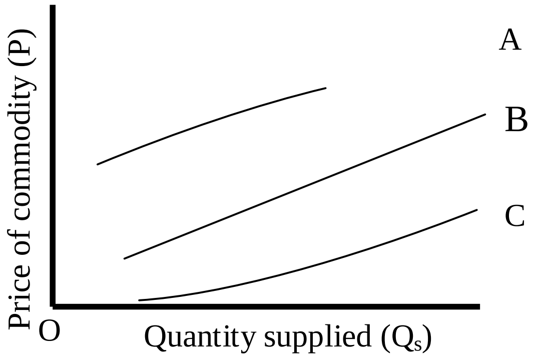
3.1 The Law of Supply

The law of supply states that the prices and quantities supplied of a commodity are directly related, *ceteris paribus*. Symbolically, it can be written as

$$Q_s \ \alpha \ P$$

Which means that quantity supplied (Q_s) of a commodity is directly related to the price of the commodity. That is, as prices increase, sellers are more willing to sell their products.

Diagrammatically, the law of supply is given below



A graph representing the law of supply could take any of the shapes A, B or C. All the three graphs have positive slopes.

3.2 Determinants of Supply

Some of the factors that may influence the supply of a commodity can be discussed as follows:

1. **Price of the Commodity:** If the price rises, the quantity supplied rises; if it falls, the quantity falls.

2. **Cost of Production of the Commodity:** If the price of the resources rises without an increase in the price of the output, the producer may reduce or even stop production. This would result in a fall in supply. A fall in the cost of the factors of production may induce producers to produce and offer more for sale in order to make more profit.

3. **Taxes and Subsidies:** Increased taxes in most cases increase the cost of production: If the producer increases the price of the goods, the demand for it may fall. So, when taxes increase he would reduce supply at current prices. Sometimes the

government gives subsidies to producers to enable them make available certain goods to the consumers at fair prices. Such subsidies tend to reduce the production cost and may result in an increase in the supply of the product.

4. **Price Expectation:** Expectations regarding the future price of a product can also affect a producer's supply of the product. If palm-oil producers speculate that oil price will rise in the foreseeable future, they may withhold some quantity of palm oil from the market, expecting to make more profit at the expected higher price. This will cause a fall in the current supply of palm oil.

5. **The Number of Producers:** More producers may enter an industry thereby increasing the supply of the product in the industry given the scale of operation of each firms, as more producers enter an industry, the level of supply will increase. As more firms leave an industry, the supply will decrease.

3.3 Elasticity of Supply

Elasticity of supply describes the degree of responsiveness of the quantity of a commodity offered in the market for sale to changes in the factors that affect the supply of a commodity. In supply analysis, however, the price elasticity of supply is the only important elasticity measure.

3.3.1 Price Elasticity of Supply

The price elasticity of supply measures the degree of responsiveness of the quantity of a commodity offered in the market for sale to a change in the price of the commodity within a period of time. Symbolically, it can be written as.

$$E_{ps} = \frac{\Delta Q_s}{Q_s} \cdot \frac{P}{\Delta P} = \frac{\Delta Q_S}{\Delta P} \cdot \frac{P}{Q_s}$$

The price elasticity of supply is always positive.

3.3.2 Types of Price Elasticity of Supply

The price elasticity of supply at any one point on a supply curve can be any of the following:

(i) **Perfect Elastic Supply:** If a relative change (increase) in price result in an infinite change (increase) in quantity supplied of the commodity.

$E_{ps} = \infty$

(ii) **Relative Elastic Supply:** If a relative change (increase) in price leads to a more than proportionate change (increase) in quantity supplied.

Eps = 1 < Relatives elastic ∞

(iii) **Relative Inelastic Supply:** A relative change (increase) in price leads to a less than proportionate change (increase) in quantity supplied.

E_{ps} = O < Relatives inelastic < 1

(iv) **Perfect Inelastic Supply:** If a relative change (increase) in price results in no change at all in quantity supplied of the commodity.

E_{ps} = O

(v) **Unitary Elastic Supply:** If the relative change (increase) in the price of a commodity results in the same relative change (increase) in quantity supplied.

$E_{ps} = 1$

3.4 Determinants of Price Elasticity of Supply

The basic determinants of the elasticity of supply of a commodity with respect to its own price are:

1. **Time Factor:** If it is possible for a producer to change quickly from producing one commodity to another, supply will be elastic. Manufactured goods are elastic in supply but agricultural commodities are not elastic in supply.

2. **The Cost of Attracting Factors of Production:** In order to expand production, more factors of production such as land, capital and labour are needed. If it is not very expensive to attract factors of production, supply may be elastic i.e. supply respond quickly to changes in price. But if it is expensive to obtain more factors of production supply may be inelastic.

3. **Product Durability:** They durability of a product affects the elasticity of supply for it. Durable products can be withdrawn from the market if prices fall too low and supplied again when prices pick up because they can be stored over a long period. They are therefore more elastic in supply than non durable goods which cannot be stored over a long period of time.

4. **Availability of Market:** The supply of a commodity will be elastic where the producer has alternative markets in which to sell his products. The supply however will be inelastic if there is no alternative market for the products.

4.0 CONCLUSION

In this unit, you have been taken through the determinants of supply, elasticity of supply and some factors that can influence supply of a commodity.

5.0 SUMMARY

In this unit, we have:

- identified determinants of supply of a commodity
- examined some factors that affect price elasticity of supply
- discussed types of price elasticity of supply.

6.0 TUTOR-MARKED ASSIGNMENT

1. Briefly discuss factors that can influence the supply of a particular commodity.
2. Identify five types of price elasticity of supply you have studied
3. Briefly discuss major determinants of elasticity of supply.

7.0 REFERENCE/FURTHER READING

Adegeye, A. J. & Dittoh, J. S. (1985). *Essentials of Agricultural Economics*. Ibadan: Impact Publishers Ltd.