COURSE GUIDE

AEA 308
PRINCIPLES OF FARM MANAGEMENT

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Printed 2022

ISBN: 978-978-058-231-9

WHAT YOU WILL LEARN IN THIS COURSE

This course Material on AEA308; Principles of farm management; a two-credit unit's course tells you briefly what to expect as you read through the course The course is the first that a student of agricultural economics will offer under farm management.

This introduces students to the essentials of farm management. After the successful completion of this course, students will be introduced to more advanced aspect of farm management. Principles of farm management are presented in three modules; Module1 discussed the meaning, principles and functions of farm management. A proper understanding of the nature of farm management is very essential in the principles of farm management, which are the fundamental laws on which management is built. Also discussed were functions of farm manager.

Module two discussed the common concepts and tools in farm management. These concepts and tools discussed include: law of diminishing returns, substitution, opportunity cost, farm valuation and depreciation. The understanding of these concepts and tools by farm manager are very important to the smooth running of any farm business. Farm input resources which include land, labour, capital and entrepreneur form the bulk of our discussion in module three. Proper understanding of these resources is very essential, as no production can take place without them.

Entrepreneur which forms the basis for this course is further elaborated in module four. The various forms of business organization are discussed. They include single proprietorship, partnership, cooperatives and corporate business.

COURSE AIMS

The overall aim of this course is to explain how to effectively manage farm Enterprises in order to achieve high profits.

COURSE OBJECTIVES

In addition to the overall aim, this course is set to achieve some objectives. After going through this course, you should be able to:

- Define farm management
- Explain the principles and functions of farm management
- List the special characteristic of agriculture that affect farm management decisions and proffer solutions to them

- Describe some of the common concepts and tools used in farm management.
- Determine depreciation charge for any farm asset
- Explain the meaning, list the characteristics and determine the importance of farm input resources-land, labour, capital and entrepreneur.

WORKING THROUGH THE COURSE

AEA 308: **Principles of Farm Managemen**t is a two (2) credit load course.

As a two-credit load, it is expected that the lecture hours will be eight (8). In addition to eight hours of lectures with the course facilitator, tutorial classes will also be organized for students to discuss the technical areas of this course. During the first reading, you are expected to spend a maximum of two (2) hours on each unit of this course. During the period of two (2) hours, you are expected to read through the text of the unit and also answer the self-assessment exercises and questions. In addition to tutorial classes, it is advisable you form discussion group with your mates to discuss some of these questions especially those involving calculations. Discussion group of between three to five people will be adequate.

COURSE MATERIALS

You will be provided with the following materials for this course:

- Course Guide

The material you are reading now is called course guide which introduced you to this course.

- Study Guide

- Textbooks

At the end of each unit, there is a list of recommended textbooks which though are not compulsory for you to acquire or read, but are necessary as supplements to the course materials.

STUDY UNITS

The following are the study units arranged in modules as contained in this course.

Module 1 The Meaning, Principles and Functions of Farm Management

Unit 1 Nature and Scope of Farm Management
Unit 2 Basic Principles of Farm Management
Unit 3 Special Characteristic of Agriculture
Unit 4 The Decision-Making Functions of Farm Management

Module 2 The Common Concepts and Tools in Farm Management

Unit 1 Economic Principles and Farm Management
Unit 2 Farm Cost
Unit 3 Valuation and Depreciation of Farm Assets
Unit 4 Literate versus Illiterate Farmers in Farm Management

Module 3 Inputs of Farm Management

Unit 1 Land
Unit 2 Capital
Unit 3 Labour
Unit 4 Entrepreneurship

Module 4 Forms of Business Ownership

Unit 1 Single Proprietorship
Unit 2 Partnership
Unit 3 Corporate or Limited Liability Company
Unit 4 Cooperative Societies

Module 1unit 1 in the material discussed the nature and scope of farm management.

The areas covered in the unit include: - the meaning, nature and scope of farm management. Unit 2 gives the general principles of management as well as the basic principles of farm management.

Unit3 gives the meaning of risks and uncertainties. Also discussed are the types of risks that affect farm management and how risks can be effectively managed in agriculture.

The last unit of the first module (unit4) discussed the types of farm management decisions and the functions of farm manager.

Unit1 which is the first under module 2 discussed economic principles as it relates to farm management. The economic principles discussed include: - diminishing returns, substitution, opportunity cost, diversification and specialization. In unit2, you will study the meaning of cost, types of cost and implications of costs in farm management. In unit3, you will also learn the various methods of estimating depreciation charges. Unit4 which is the last in this module discussed the difference between substance and commercial agriculture.

In unit 1 of module 3, you will be exposed to the meaning and characteristics of land, sources of land and management of land. Unit2 discussed capital resources. The areas covered include: - meaning and characteristics of capital and sources of capital for agricultural production. In unit3, you will learn about the meaning of labour, characteristics of labour, sources of labour and factors that affect the efficiency of labour.

Module 4 which comprises of unit1; single proprietorship, unit 2: partnership, unit 3; corporate organization and unit4; cooperative societies, discussed the meaning, features, advantages and disadvantages of these forms of business ownership.

TEXT BOOKS AND REFERENCES

As earlier discussed, AEA308 is an introductory course to farm management. For detailed information about the areas covered in this course, you are advice to consult more recent editions of the following recommended books:

Abbott J.C. and J.P. Makeham (1980). *Agricultural Economics and Marketing in the tropics.* London. Longman.

Adegeye A.J. and J.S. Dittoh (1985). *Essentials of Agricultural Economics*. Ibadan. Impact publishers Nig. Ltd.

Castle N.E. and H.M. Becker (1987). *Farm Business Management*. New York. Macmillan.

Upton M. (1993). *Farm Management in Africa*. London Oxford University Press.

Uptom M. and Q.B.O. Anthonio (1981). *Farming As a Business*. London: Oxford University Press.

ASSESSMENT

There are two components of assessment for this course:

- Tutor-Marked Assignment (TMA) ·
- End of course examination.

FINAL EXAMINATION AND GRADING

This examination concludes the assessment for the course. It constitutes 70 percent of the whole course. You will be informed of the time for the examination through your study centre manager.

SUMMARY

AEA308: Principles of Farm Management is designed to provide background information and practical experiences on how to successfully form and manage a farm business. By the time you complete studying this course, you will be able to answer the following type of questions:

i. What is farm management?
ii. State the principles of farm management · What are the functions of farm manger?
iii. Give the characteristics of agriculture that affect management decisions and suggest solutions to them.
iv. Explain the following economic concepts and tools as they relate to farm management:
    - Law of diminishing returns
    - Farm cost
    - Diversification and specialization
    - Depreciation of farm assets

CONTENT

Module 1 The Meaning, Principles and Functions of Farm Management

Unit 1 Nature and Scope of Farm Management

Unit Structure

1.1 Introduction

Dear students I welcome you to Unit 1 of this Course AEA308 Principles of farm management. This a three hundred level course and as such you must be familiar with the word Agriculture which is the science of converting productive resources to produce livestock's, crops and fisheries. The productive resources include: land, Labour, capital and entrepreneur.

A farm is the area cultivated by a farmer or by a group of farmers in common. Legally, a farm means an area of land under single ownership and devoted to agriculture either to raise crops or for pasture. It may be a one field or many fields. On the contrary, management refers to the function of implementing the production plan and making necessary adjustments in the business of farming so that farm business may yield maximum returns.

Agriculture entails growing of crops and raising of livestock for milk, wool, eggs, meat, provision of raw materials for industries and marketing of agricultural products for man"s use. However, with the passage of time farm practices have been improved to meet the growing demand and improving quality of the agricultural products. The natural inputs are being increasingly replaced by purchased inputs. Similarly, the production instead of being used for family is market oriented. Thus, the concept of agriculture is charging from just a way of life to a business preposition. There are many branches of agriculture which among others include: agricultural economics, crop science, soil science, animal science, fishery, forestry and agricultural engineering.

Agricultural economics involves the application of economic principles in agriculture of which farm management is one of the important branches. It is an applied phase of economics in which attention is paid to all aspects of agricultural business. Management is the ability of some people to incorporate economic progress through the direction and coordination of other people‟s efforts.

Definitions Of Farm Management

1. Farm management is the utilisation of sound principles in selection, organisation and conduct of an individual farm business for the purpose of obtaining to the greatest possible profit.
2. Farm management as a discipline involves the application of scientific and technical principles to the solution of the day to day problems facing the farmer.
3. Farm management is the science which considers the organisation and operation of the farm from the point of view of efficiency and continuous profit.
4. Farm management is the study of the business principles in farming. It may be defined as the science of organisation and the management of the farm enterprise for the purpose of securing the greatest continuous profits.
5. Farm management subject is the presentation of business and scientific findings in their application to farming for the purpose of indicating the way to greatest continuous profit.
6. Farm management as the sub-division of economics which considers the allocation of limited resources within the individual farm, is a science of choice and decision making and thus is a field requiring studied judgment.

From the above cited definitions, we can conclude that farm management is a science which deals with judicious decisions on the use of scarce farm resources, having alternative uses to obtain the maximum profit and family satisfaction on a sustainable basis from the farm as a whole and under sound farming programmes. Thus, it is a continuous process of decision making regarding improved adjustment of farm operations.

Farm management is best examined and understood under the whole farm situation. This include a study of the

a) Human elements
b) Technical elements
c) Economic, financial, growth and investment aspect
d) Risk and uncertainty

Economics is the core of farm management, since the key task of farm management is making choice between two or more alternatives.
This course is designed to provide essential skills needed in farm business.

1.2 Learning Outcome
By the end of this unit, you should be able to:
. Define Farm Management
. State the relationship between Agricultural Economics and Farm Management
. Identify the Nature of Farm Management
. Describe the Scope of Farm Management.
1.3 Main Content

1.3.1 The Meaning of Farm Management
Farm management is a science which deals with judicious decisions on the use of scarce farm resources, having alternative uses to obtain the maximum profit and family satisfaction on a sustainable basis from the farm as a whole and under sound farming programmes. Thus, it is a continuous process of decision making regarding improved adjustment of farm operations.

Farm Management is the art of applying economic principles in the management of a farm business OR farm Management could be defined as the science which deals with the organization and operation of the farm with a view to generating maximum possible income on a continuous basis. It could also be defined as a science which deals with the proper combination and operation of production factors including land, labour and capital and the choice of crop and livestock enterprises to bring about a maximum and continuous return to the most elementary operation units of farming.
Farm Management – a branch of Agricultural Economics – deals with the economics of individual farm units. Farm management is concerned with the organization of factors of production – land, labour and capital for the production of farm products. It is concerned with the operation of the farm firm so as to achieve certain predetermined objectives.
Generally speaking, management is the ability of some people to compel economic progress through forceful direction and co-ordination of other people's efforts. When applied to farm business, management could be seen as a practical undertaking of the farm business with respect of how to put the crop and livestock husbandry to work on the farm as a means of obtaining high profit.
Farm management as an art basically calls of both physical and mental activity. It involves a careful scrutiny of the thought processes the theories and practice of the skills which the farmer uses while carrying out his many tasks. As a science, Farm Management involves a statement of

research objectives, the development of a method of collecting and collating data and analyzing such data so as to find solutions to present problems.

Self-Assessment Exercise
1: Farm management as an art basically calls of both physical and mental activity. Discuss.

Objectives Of Farm Management

Dear students, The objective of modern farmer is to maximize net profit of the farm. Now modern cultivator has several wants which can be satisfied with the help of money, so that the farmer may try to obtain maximum cash returns from the farm. Thus, main objective of farm management are mentioned below.

1. To know which enterprise gives maximum profit.
2. To determine most profitable crop production and live-stock raising methods.
3. To study the input output relationships in agriculture and determine the most profitable input output combination.
4. To find out ways and means for increasing the efficiency of farm business so that maximum profit can be attained.
5. To evaluate the appropriateness of used farm resources.
6. To study the cost per hectare and per quintal.
7. To determine the optimum size of farm which gives maximum per hectare net profit and maximum per hectare return?
8. To examine relative performance of different kinds of machineries in carrying out different farm operations.
9. To find out ways and means to escape and face risk and uncertainty conditions.

1.3.2 Nature of Farm Management

A farmer needs to know not only how to cultivate his crops and tend his livestock, but also how to manage his farm. Many farms consist of different sections, each devoted to the production of one kind of crop or livestock. These sections of the farm are known as enterprises. Every farmer must face the management problem of the enterprises. The importance of farm management can manifest itself in various ways, like detecting and finding solutions to management problems of deciding which enterprises to have, how much to produce in each enterprise and what method to use.

Every farmer must know and be able to do all the practical jobs connected with farming enterprises. For this practical knowledge, there is no

substitute. This explains the fact that good farm management is often considered as an art rather than a science and this explain why some farmers fail while others succeed.
For farmers to succeed they must also know the scientific principle of crops and livestock production particularly in the area in which the farming is to be practiced and also the soil type, disease, weather and the season could be studied or obtained from an extension worker in the area. It so demands that farmers must know and use the basic business principles in accordance with which the common farm practices and scientific principles should be applied.

Farm Management is also concerned with effective employment of socially acceptable guidelines for all levels of organization. In policy formulations and achieving results, relevant facts must be considered. It must at all times try to attain optimum level of effectiveness and economy of operations. To do this, human satisfaction, welfare package and morale boosting must be promoted. Farm Management responsibility is a continuous and living activity which must not be replaced by routines or operational techniques meant for lower level operatives in the absence of the manager. No matter how large an organisation is, the management process must be seen as a unified process in which all the parts are inter-related and working towards a single purpose or set of objectives. The management process is based on systematic diagnosis of the problem, finding the facts, assessing and interpreting the findings, making decisions, giving instructions, ensuring execution and checking the results. Farm Management performance is judged by the achievement of purpose or objectives, effectiveness of operations and most important, the contentment of the farm workers.

1.3.2 The Scope of Farm Management

Dear Students, Farm management is generally considered to fall in the field of micro economics. It deals with the allocation of resources at the level of an individual farm. While in a way it is concerned with the problem of resource allocation in the agricultural sector, and even in the economy as a whole, the primary concern of farm management is the farm as a unit.
Farm management is becoming popular in the present world. Its scope is very wide and increasing year after year. Agriculture is modernising and to carry out agriculture successfully, knowledge of farm management is pre-requisite. In a sense it deals with the allocation of resources at the level of an individual farm. It covers aspects of farm business which have a bearing on the efficiency of the farm. The subject of farm management consists research, teaching and extension.

(i)* Farm management research*: Year after year new implements are manufactured, new input substitutes are coming in the market, as well as to satisfy desire of cultivator for more income and farm management research must be continued. It is necessary to develop suitable cropping pattern plan. Thus, farm management research is essential in developing countries; following aspects need to be continuously researched:

a) Delineation of homogeneous type of farming areas in different regions of the country.

b) Generation of input-output coefficients.

c) Working out comparative economics on various farm enterprises.

d) Formulation of standard farm plans and optimum cropping pattern at different size of holding.

e) Suitable model of mechanization and modernization.

f) Evaluation of agricultural policies in the context of growth of farm-firms.

(ii) **Farm Management Teaching*:*** Most of the agricultural graduates directly or indirectly concerned with farm management and hence agricultural graduates must be well trained in farm management. Higher education in agriculture must be provided to those who are interested for continuous improvement in the subject matter. In Nigeria, Agricultural Research Institute and Universities are playing an imperative role for teaching farm management courses

(iii) **Farm Management Extension*:*** It is necessary to organise various training programmes for farmers so that they will understand various aspects of farm management. However short courses in farm management for progressive farmers and younger farmers can be organised in areas of Farm Planning, cost minimization, making farming more profitable, farm record keeping etc. Therefore extension service in farm management can go a long way in improving the managerial ability of the farmers through agricultural training programmes. Thus, research, teaching and extension together can help to improve the ability of the farmers to make desirable changes in the utilisation of scarce resources at the farm. These in turn increases the income and improve the standard of living of the farmers.

Self-Assessment Exercise

2: Explain the following terms:

(i) Farm management research

(ii). Farm management teaching

(iii). Farm Management Extension

1.4 Conclusion

In this unit, we have discussed the meaning, nature and scope of Farm Management. From these discussions, it can be concluded that the main objective of Farm Management is to ensure proper combination and operation of production resources to bring about a maximum and continuous return to the most elementary unit of farming.

1.5 Summary

In this unit we have learnt that:

· Farm Management is a branch of Agricultural Economics and Agricultural Economics is also a branch of Agriculture.

· Farm Management embraces the proper co-ordination of both human and material resources on the farm as a means of maximizing the farmer‟s net farm income. · Farm Management is seen as both an art as well as science.

· The scope of Farm Management is as wide as that of Agricultural Economics. It includes: production, distribution, consumption and exchange of farm products.

1.6 References/Further Reading/Web Sources

Akinwumi J. A. (1981). *Business Management*. Synoptic Lecture Notes.
Ayinde A. T. Abdul-Azeez A. and Adebayo R.O (1999). *Agricultural Economics and Statistics.*
Ado – Ekiti. Adebayo Publishing Nigeria Ltd.
Castle, N.E. and Becker H.M. (1967). Farm Management. New York. Macmillan Pub. Heady, E.O. and Jenson H.R. (1984). *Farm Management Economics*. Englewood Cliffs. Prentice Hall Inc.
Lekhi R.K, Joginder Singh (2016) Agricultural Economics an Indian Perspective, Kalyani Publishers Ludhiana-New Delhi India.
Upton M. (1993). *Farm Management in Africa*. London. Oxford University Press.

1.7 Possible Answers to Self-Assessment Exercises

Answers:

1. Farm management as an art basically calls of both physical and mental activity:

It involves a careful scrutiny of the thought processes the theories and practice of the skills which the farmer uses while carrying out his many tasks. As a science, Farm Management involves a statement of research objectives, the development of a method of collecting and collating data and analyzing such data so as to find solutions to present problems.

2. Explain the following terms:

(i) Farm management research

(ii). Farm management teaching
(iii). Farm Management Extension

(i) **Farm management research*:*** Year after year new implements are manufactured, new input substitutes are coming in the market, as well as to satisfy desire of cultivator for more income and farm management research must be continued. It is necessary to develop suitable cropping pattern plan.

(ii) **Farm Management Teaching*:*** Most of the agricultural graduates directly or indirectly concerned with farm management and hence agricultural graduates must be well trained in farm management. Higher education in agriculture must be provided to those who are interested for continuous improvement in the subject matter. In Nigeria, Agricultural Research Institute and Universities are playing an imperative role for teaching farm management courses

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Unit 2 Basic Principles of Farm Management Contents

2.1 Introduction

Dear students I welcome you to Unit 2 of this Course AEA308 Principles of farm management.
In unit 1, we discussed the nature and scope of Farm Management. Like other business enterprises, the ultimate goal of Farm Management is profit making through efficient allocation and utilization of farm resources. Farm Management was also viewed as an art as well as a science.
The scope of Farm Management revealed that the study of Farm Management involved all aspects of human endeavour. There is no area of agricultural economics that is not relevant to Farm Management. The study of production, distribution, consumption, and exchange are all essential in the study of Farm Management. This unit is devoted to the study of the principles of Farm Management.

2.2 Intended Learning Outcomes

By the end of unit 2, you should be able to:
·Define Principle
· List and explain ten (10) general Principle of Management
· Identify and explain four (4) basic Principles of Farm Management.

2.3. Main Content

2.3.1 Definition of Principles

A principle is a fundamental truth, the basis of reasoning, the primary element or general law. The principles of Farm Management represent the fundamental laws on which Farm management practices is built.
Principles must be general in coverage and applicable to diverse sizes and composition of the farm enterprises. Farm Management principles stand out and provide a foundation for effective practice.

2.3.2 The General Principles of Management

The general principles of management must be distinguished from the methods or procedures for achieving the goals. They relate to the primary purpose of an enterprise which is to provide goods and services which are wanted by consumers, employing the most economical and convenient methods.

Principles of management are only guidelines and that require great skill in using and adapting them to particular circumstances. There are fourteen (14) principles given and elaborated by Henri Fayol as follows:

1. Division of Work

Specialization, whether by workers or farm manager, It is necessary to provide the required knowledge and expertise. Farm manager can train farm workers to specialize in the various fields of agriculture.

2. Authority and Responsibility

Authority may be formal, conferred as a result of position in the organizational hierarchy or personal, the result of personal characteristics. Ideally, it should be both.

Responsibility must go with and match authority. The purpose of authority is to direct activity in the right direction, sanctions or punishments must be available to be applied to those who won't conforms.

3. Discipline

This may arise from formal or unwritten agreements between management and workers as to what is proper conduct or it may be imposed on workers solely by management.

4. Unity of Command

Each worker must have one boss from whom he receives orders:

Departmental responsibility must be very carefully set out so that there is no overlapping of authority.

5. Unity of Direction

There can be only one head of the organisation whose job is to see that all efforts are directed to the same overall goals.

6. Subordination of Individual Interest to General Interest

At the individual level, the employer or manager must submerge his personal interests or leave them behind at the workplace door. In the case of sections and departments, group interests and aims must be subordinated or suppressed for the common goal.

7. Remuneration of Personnel

It must be fair and satisfy the employer as a reasonable cost for services rendered and the employee as a means of livelihood and return for effort. Time rates, job rates, piecework and bonus schemes are all admissible as appropriate.

8. Centralization

The degree of centralization would however, vary according to circumstances and the abilities of the people concerned.

9. The Scalar Chain

This is the line of authority from superior to subordinate, from the very top to the bottom of the business. In each aspect of the business, the chain must be unbroken i.e. at each level, a man must have an immediate boss, who himself has a boss and so on up to the managing director. The scalar chain is the channel for authority to communicate and implements decisions.

10. Order

A place for everything and everything in its place. This applies to materials layout and human or social order. Social order needs a careful balance or requirements and resources.

11. Equity

Fairness, kindness and justice to all, must not only be done but be seen to be done.

12. Stability of Tenure of Personnel

As much as possible, a firm should provide a career structure so that its manager stay and progress within the firm. Outsiders may at times have to be brought in, but there must be a good reason for doing so.

13. Initiative

Encouragement of initiative promotes zeal and energy. Its use, must however, be within the limits of respect for authority and discipline.

14. Espirit de Corp

This is the last of the principles and one which must permeate all others. It is described as harmony among all members of the organisation. The all too frequent management practices of divide and rule is roundly condemned.

2.3.3 Basic Principles of Farm Management

All the general principles enumerated above are relevant to Farm management and can easily be related to the basic principles given below:

· **Planning and Control**

Planning and control are important tools in Farm Management. They provide the administrative aspect of the management. The essential steps in planning and control involve setting of goals and objectives, laying down of responsibilities for specific sections, determining or setting appropriate standard of performance through systematic analysis and assessment of the relevant facts; then ensuring effectiveness by continuously comparing the achievements with the set goals. Work specialization, simplification and standardization all help to make the routine effective.

Organisation

Organisation involves defining individual responsibilities as well as inter-relationships between sections. A large farm business establishment involving many enterprises requires subdivision into appropriate sections with specialized related functions. As the organisation grows larger, the individual supervisor may become overloaded. The need then arises for the delegation of the part of the responsibilities to lower-level supervisors. Arrangement must then be made to ensure effective co-ordination. There must be clear lines of responsibility linking the farm Manager with various decision making or execution centres; each supervisor must be responsible for a limited number of subordinates in inter-related activities. Functional sections must be so integrated as to avoid impairing the clear lines of responsibility and command. Delegation of responsibility does not excuse the superior officer from being accountable for any shortcoming.

No good farm manger will relax after delegating authority. At least occasional checks are carried out to pick up slackness or deviation from instructions.

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Co-ordination

There must be specific responsibility for deliberate continuous coordination with laid down procedures. While linking up various aspects of the enterprise, management must promote personal and social satisfaction of all workers within the establishment. Group satisfaction must be sought over and above individual satisfaction and since each individual has varying external influences, it is very difficult to attain this group satisfaction while completely satisfying each individual.

Regular contact and exchange of ideas ensures that all concerned are in consonance with the management. There is unified command and no one sees himself as slave to a boss. The set of instructions is initially developed through consultation with various levels of operators and it is best to allow people to understand why instructions are given. A clear understanding of the impact of each person‟s action or inaction will gear him up towards his responsibility. These instructions must follow clear lines of responsibility and the structural setting in the organisation.

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Motivation

The morale is kept high by keeping all workers informed about the activities, the successes and drawbacks, consulting them before new regulations are put forward, fostering the sense of responsibility, allowing

them to develop their own capabilities within the overall goals of the organisation. Farm manager must give workers room to contribute more than mere performance of their allotted routine duties.
There must be security of the job and confidence that one is not simply being used. There must be fairness and objectivity in dealing with workers. Discipline must be maintained and accepted by subordinates.
When there is a sense of responsibility, there will be no need to gear people to action.
Continuous review of codes of conduct helps to keepmthem in line and updated. The personality of the farm manger to a great extent determines the level of moral and discipline in the organisation.

Self-Assessment Exercise
1: Explain the meaning of the term „Principle".

2. Differentiate between order and equity.

2.4 Conclusion

You have noted the fundamental laws guiding the operations of Farm Management. It can be concluded from our discussions that any farm manager that failed to strictly adhere to guiding principles will find it difficult if not impossible to achieve his goals.

2.5 Summary

In this unit, you have studied the basic principles of Farm Management. In this regard you have learnt that:

1. Principle is a fundamental truth or general law.
2. Henri Fayol presented fourteen (14) generally acceptable principles of management.
3. These fourteen (14) principles were condensed into four (4) principles of Farm Management.
4. The four (4) basic principles of Farm Management include: planning and control, organisation, co-ordination and motivation.

2.6 References/Further Reading/Web Sources

Adegaye A.J. and J.S. Dittoh (1985). *Essential of Agricultural Economics*. Ibadan. Impact Publishers Nig. Ltd.
Anthonio B.O. and M. Upton (1965). *Farming as Business*. London. Oxford University Press.
Lekhi R.K, Joginder Singh (2016) Agricultural Economics an Indian Perspective, Kalyani Publishers Ludhiana-New Delhi India.
Phillips T.A. (1961). *Farm Management in West Africa*. London. Longman Group Ltd.

2.7 Possible Answers to Self-Assessment Exercises

Answers:

1. Explain the meaning of the term „Principle".

A principle is a fundamental truth, the basis of reasoning, the primary element or general law. The principles of Farm Management represent the fundamental laws on which Farm management practices is built.

Principles must be general in coverage and applicable to diverse sizes and composition of the farm enterprises. Farm Management principles stand out and provide a foundation for effective practice.

2.

Order:

A place for everything and everything in its place. This applies to materials layout and human or social order. Social order needs a careful balance or requirements and resources.

Equity:

Fairness, kindness and justice to all, must not only be done but be seen to be done.

Unit 3 Special Characteristics of Agriculture That Affect Management Decisions.

CONTENTS

3.1 Introduction

Dear students I welcome you to Unit 3 of this Course AEA308 Principles of farm management.

In unit 2, you read about the principles guiding the operation of a successful farm business. Some of these principles include: planning and control, organizing, co-ordinating and motivation. This unit will be devoted to discussing the special characteristics of agriculture that affect Farm Management.

3.2 Intended Learning Outcomes

By the end of the unit, you should be able to:

· Define uncertainty

· Differentiate between risk and uncertainty.

. Explain five (5) major types of risks in agriculture that affect management decisions

· Identify and explain five (5) possible solutions to reduce the effect of risks on the farm.

3.3 Main Content

3.3.1 Meaning of Risk and Uncertainty

3.3.2 Uncertainty

This is a situation where an action has got a set of possible outcomes, the probability of which is completely unknown. For example, no one can assign probability to how many times he will fall sick within a year.
Farmers normally calculate his labour requirements on the ground that his workers will be healthy throughout the year and that each labour will supply at least eight (8) working hours per day. Similarly, no one can precisely predict when he is going to die. Farm manager may project his activity for the whole year and he may not reach the end of that year before he dies. Any situation where one cannot predict what can happen is normally regarded as uncertain situation.

3.3.3 Risk

Risk on the other hand is a situation where each action leads to one of a set of possible outcomes, each outcome occurring with a known probability. Most economic activities assume that the future can be predicted with some accuracy. This is not usually true most especially for agricultural production. In fact, business is faced with risks and uncertainties which have some effects on management decisions.

3.3.4 Types of Risk That Affect Farm Management

There are many features of agricultural production which make farm management operations very difficult unlike industrial enterprises. This is due in most cases to the special characteristics of agricultural enterprises. Some of these characteristics include:

Production Uncertainty

Farmers practice or operate in an environment which in most cases is beyond their control. Varying weather conditions, crop failure and animal diseases prevent timely execution of Farm Management.
Production uncertainty can manifest itself in various ways. For instance, under rain fed agriculture, the yield of crops will depend upon the amount of rainfall recorded at the period. Total crop failure can result if rain does not fall at all or if it does not fall at the right time, on the other hand, excessive rainfall can cause erosion and leaching of plant nutrients. The vagaries of weather may also affect harvesting and drying operations. There may be outbreak of disease which could wipe out a whole livestock population on a farm. A good example is the outbreak of avian influenza in Nigeria. All these have serious implications on Farm Management decisions.

ii. Price Changes

The inputs which the farmer uses and the output which he produces are both subjected to wide fluctuations in prices. Input prices really go down but the prices of output can easily go down. Seasons and overproduction affect the prices of output. Though, price fluctuations occur in other enterprises, they are more difficult to deal with in farm planning. For instance, increase in wages cannot easily be absorbed in agriculture since farmers cannot easily increase his price to match the new increase in costs. This is in contrast to a situation where the price of petrol increase by 50 percent, the industrial sector will increase the price of their products immediately to accommodate these additional costs.

iii. Government Actions and Policies

Various Governments take actions, the effects of which are supposed to be felt in farming. Usually, the farmer may be unaware of what Government actions will be before a production season. There are policies like guaranteed minimum prices, land use decree, agricultural credit guaranteed scheme, the abolition of commodity marketing boards.

All these policies are important and management decisions must be taken within this framework.

iv. Actions of other People

Agriculture is practiced by a large proportion of Nigerians. Most of them operate on small holdings. These farms are scattered and two to five farmers may have two hectares of farm land in the same area. If a farmer controls pests in his farm or control diseases in his poultry farm while others do not, then such a farmer is wasting his time, energy and money as the pests or diseases from the uncontrolled farms would spread to the farm that had been treated. The actions of one farmer will therefore affect the farms of others. Actions of credit institutions with regard to the amount of loan granted as well as the timely release of the loan may also have effect on decisions of farmers; effect of which the farmer may not envisage.

v. Health of Farm Workers

Another important factor that affects management of farm business is the health condition of farm workers. The efficiency of the farm workers is closely related to their state of health. At the beginning of planting season farm manager will calculate the labour requirement for each month based on the condition that the farm workers will be healthy throughout the year. Death of farm workers and diseases like guinea worm can take workers completely out of farm. Sickness and death of farm workers can affect the achievement of labour objectives for the year.

vi. Other Risks and Uncertainties

The greatest problems facing farmers, whether new or old, are the problems of risks and uncertainties. Apart from the problem of production uncertainty discussed earlier, there are others, for example water shortage, power failure, change in technology, etc. which may complicate the farmer's decision process. Due to frequent vandalization of electric cables in many parts of Nigeria, electricity supply is no longer reliable. Any farm business that depend on electricity supply may run into serious problem as the generating set that was designed only to assist public power supply may eventually be the only source of power supply. Similarly, inventions of new technology and methods of farming may lead to obsolescence of production techniques and farm equipment. This may have serious effect on the farm plan and management decisions.

3.3.4 Sources of Risk in Agriculture

The various sources of risks in agriculture are: natural, social, technological and political.

Natural elements: such as weather, drought, flood, frost, rainstorm, fire, plants and animal diseases. Risks from the uncertain natural growth processes of crops and livestock, with typical sources of these risks relating to weather, climate, pests and diseases. Excessive heavy metals in soils or soil salinity will also help in reducing the yield of the crops.

Social and market risks: Such as theft, arson civil commotion. Market risk looks at uncertainty with prices, costs and market access. Means of volatility in agricultural commodity prices include weather shocks and their effects on crop productivity. Energy price shocks and asymmetric access to information are additional sources of market risk. International trade, liberalization, and protectionism are other sources of market risk because they can increase or decrease market access across multiple spatial scales.

Technological risk: This could arise from the adverse effect of technological development such as pollution, contamination, radiation and explosion.

Political and Institutional risk: This could emanate from the activities of political office holders in form of political instability and frequent changes of agricultural policies, programmes and regulations that effect agriculture. Government may create risk through unpredictable changes in policies and regulations. Sources of institutional risk can also derive from informal

institutions such as unpredictable changes in the actions of informal trading partners, rural producer organizations, or changes in social norms that all effect agru=iculture. Farmers are increasingly supported by and connected to institutions, especially as farm production becomes more market focused.

Personal risk: Personal risk are specific to individual and relate to problems with human health or personal relationships that affect the farm or farm household.Sources of such risk include injuries from farm machinery,

Financial risk: This refers to the risk associated with how the farm is financed. This is defined as the additional variability of the farm's operating cash flow due to the fixed financial obligations inherent in the use of credit. (De Mey et al., 2016). Some sources of financial risk include changes in interest rates or credit availability, or changes in credit conditions.

3.3.6 Management of Risks in Agriculture

The following methods can be used to reduce the effect of risks and uncertainties in farming:

1. Maintaining Flexibility and Liquidity

Flexibility means planning in such a way as to be able to shift interests when favourable conditions or favourable opportunities arise. It will not be advisable to have too rigid methods of production. Farmers normally operate in a dynamic environment and information about improvements in production methods often become available to them. Small changes in prices of resources may need a re-combination of resources which will allow the farmer to take advantages of greater profit. Some examples of flexibility in farm organisation and production methods include:

The proportion of fixed to variable cost on a farm enterprise can influence the ease with which a farmer moves out of a particular enterprise. The higher the proportion of fixed costs, the higher the loss when conditions become unfavourable.

Businessmen who are uncertain of longtime investment could invest in enterprises that yield results in short time. An example of this is grain production as opposed to fruit tree.

Liquidity involves having some unused cash balance or unused borrowing power which can give the farmer the financial ability to adjust his plans in order to give financial effect to a flexible plan.

2. Diversification

Diversification entails growing more than one crop so as to guide against total
loss. The rationale is that if the returns to one crop is low in one particular year owing to the vagaries of weather, the other crops may not be equally affected. The other form of diversification includes multiple farm locations, intercropping, staggered planting and mixed farming.

Diversification is here defined as the involvement of farmer on more than one enterprise at the same time. The basis of using diversification as a strategy against risk is that the yields or prices of all chosen enterprises are not likely to be adversely affected at the same time.

This combination of more than one enterprise can reduce loss of annual incomes caused by damage to one of them.

Enterprises with the lowest correlation of net income can be combined.

For instance, to reduce variability of income resulting from crop production, crops like yam and cassava should not be combined, since both crops require almost the same resources. Incomes from these two enterprises are likely to be affected by the same factors. On the other hand, the income from poultry is not likely to be related to yam production or even to maize production, except if maize grown is fed to livestock. In order, to maintain a stable income therefore, crops and livestock should be combined.

3. Contracts

One way of diverting risk to others is by the use of contracts. Under this strategy, a buyer assures a seller a fixed price in advance and goods are delivered to the buyer at a future date. In this case, price uncertainty is transferred to the buyer. Apart from taking care of price fluctuations, it also assures the seller a market outlet.

Farmers can make arrangements for crops and livestock to be produced and for inputs to be used during a production season. If prices fall, the farmer will get the higher contracted prices for what he produces. If, however, prices increase, the farmer loses, but then, that is the cost of risk. It however, ensures a relatively stable income. If the farmer is certain that prices of output will increase, then he should only contract for what he is to buy and not what he is to sell.

4. Insurance

By insurance, a private company or state organization guarantees to pay a certain sum in the event of a disaster in return for a relatively small annum premium. The main risks that can be insured against include fire, lighting, storm, theft, fire etc. Farmers can insure with the Nigeria Agricultural Insurance Company (NAIC).

Insurance may be defined as the substitution of a certain small cost for the possibility of a large but uncertain loss. Insurance may be used to meet risks, such as the death of the businessman (life insurance), fire or accidents (property insurance) or crop loss (crop insurance). Insurance is a cost. The cost is referred to as a premium payment which must be paid by the insurer before benefits can be collected. Insurance is made possible because many people wish to avert risk and pay the premium but fewer people actually claim the benefits. There may be need to insure the farmer against death, accident, fire outbreak and other hazards. This is why the Federal Government of Nigeria established National Agricultural Insurance Company (NAIC), to safeguard farmers against crop failure, disease outbreak or poor economic conditions. **v. 5. 5. 5. 5.Inventory Management**

A good farm manager must be able to watch movement of prices. If prices of his farm output are likely to rise, for instance, he should be able to stock his warehouse and when prices are likely to fall, he should stock less. Similarly, the farm manager can watch out for the movement of prices for his farm inputs.

6. Guaranteed Minimum Price

There are many programmes put in place by Government that are aimed at helping the farmers.

One of such programmes is buying the farmers‟ crops at an agreed minimum price, if the farmer cannot sell the crops at the current market price. For this to be effective, the minimum price must be enough to cover the cost of production of such crops or livestock and allow for normal profit.

7. **Use of Native safeguards-** This consists of fencing the farm to prevent animal from entering the farm and destroying crops, clearing farm border lines to scare away animal pests, the erection of scare crows or noisy making devices to keep away birds and other animals from doing damage to the crops on the farm.

3.3.7 Practices for Enhancing Good Farm Management and Minimizing Risks.

For all types of agricultural enterprises, the following practices are recommended for enhancing good farm management and risk minimization.

1. Efficient farm planning and adequate project preparation.
2. Sound inputs procurement arrangement.
3. Adequate resources combination and utilization.
4. Good record keeping
5. Continuous monitoring and evaluation

For a crop enterprise in particular, the following should be considered:

2. Good site selection
3. Procurement of viable seeds and the varieties recommended and suitable for the local environment and soil types.
4. Good plan preparation at proper time to ensure adequate seed germination and crop growth.
5. Planting according to the prevailing crop calendar of operations based on the crop calendar that is applicable to that environment.
6. Using correct spacing, seed rate and plant population.
7. Applying recommended types and rate of fertilizer at the correct time.
8. Embarking on effective weed control.
9. Adopting effective pest and disease control measure.
10. Prompt harvesting after seed maturity and proper drying.
11. Keeping adequate record and ensuring prudent management of finance.

For a livestock enterprise:

2. Select good livestock breeds or parents’ stock.
3. Purchase breeds from reputable source.
4. Provide good pasture especially for ruminants.
5. Provides good sanitation and housing unit
6. Provide good veterinary services
7. Keep adequate farm records

8. Ensure prudent management of funds.

Self-assessment exercises:
1. Differentiate between risk and uncertainty.
2.Explain the concept of diversification.

3.4 Conclusion

In unit 3, we have discussed the special characteristics of agriculture that affect farm management decisions. From our discussions, it was concluded that prices of farm output cannot easily be adjusted like industrial products to meet unforeseen circumstances. Therefore, farmers should take precautions to reduce the level of risks and uncertainties on the farm.

3.5 Summary

In this unit, we have learnt that:

· When you take risk, you can predict the sets of possible outcomes.
· When operating under uncertainty, you cannot predict the outcome.
· Farm business operates under risk and uncertainties.
· Some of the risks in farm business that affect Farm Management decisions include: production uncertainty, price changes, Government actions and policies, action of other people, health of farm workers and other risks and uncertainties.
· To avert risk and uncertainty:
· Be flexible in plans
· Diversify enterprises
· Transfer risk to others through contract and insurance
· Study the other party to avoid being cheated · Seek knowledge.

3.6 References/Further Reading/Web Sources

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3.7 Possible Answers to Self-Assessment Exercises

Answers:

1.

Risk

Risk is a situation where each action leads to one of a set of possible outcomes, each outcome occurring with a known probability. Most economic activities assume that the future can be predicted with some accuracy. This is not usually true most especially for agricultural production. In fact, business is faced with risks and uncertainties which have some effects on management decisions.

Uncertainty

This is a situation where an action has got a set of possible outcomes, the probability of which is completely unknown. For example, no one can assign probability to how many times he will fall sick within a year.
Farmers normally calculate his labour requirements on the ground that his workers will be healthy throughout the year and that each labour will supply at least eight (8) working hours per day. Similarly, no one can precisely predict when he is going to die. Farm manager may project his activity for the whole year and he may not reach the end of that year before he dies. Any situation where one cannot predict what can happen is normally regarded as uncertain situation.

2. **Diversification** entails growing more than one crop so as to guide against total
loss. The rationale is that if the returns to one crop is low in one particular year owing to the vagaries of weather, the other crops may not be equally affected. The other form of diversification includes multiple farm locations, intercropping, staggered planting and mixed farming. Diversification is here defined as the involvement of farmer on more than one enterprise at the same time. The basis of using diversification as a strategy against risk is that the yields or prices of all chosen enterprises are not likely to be adversely affected at the same time.
This combination of more than one enterprise can reduce loss of annual incomes caused by damage to one of them.
Enterprises with the lowest correlation of net income can be combined.
For instance, to reduce variability of income resulting from crop production, crops like yam and cassava should not be combined, since both crops require almost the same resources. Incomes from these two enterprises are likely to be affected by the same factors. On the other hand, the income from poultry is not likely to be related to yam production or even to maize production, except if maize grown is fed to livestock. In order, to maintain a stable income therefore, crops and livestock should be combined.

Unit 4 The Decision-Making Functions of Farm Manager

4.1 Introduction

Dear students I welcome you to Unit 4 of this Course AEA308 Principles of farm management.

In the last unit we discussed and noted the special characteristics of agriculture that affect management decisions. In discussing the unit, we differentiated risk from uncertainty. We also discussed the various types of risks associated with farm business and how we can manage these risks so as to reduce their effects on farmers. In this unit, we shall discuss the decision making functions of farm managers.

4.2 Learning Outcome

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

· Explain the concept of decision making
· Identify the essential steps in decision making process
· Enumerate at least five decisions or problems confronting farmers on the farm · state at least five functions of farm manager.

4.3 Main Content

4.3.1 The Concepts of Decision Making

Decision making is the activity of selecting from among possible alternatives, future course of action. It is essentially therefore choosing between alternatives, even if the alternatives are to accept a proposed change or to continue as at present. Decision - making is an essential component of management in all the stages of planning and control. However, managing involves more than decision making alone. Decisions clearly must be both agreed with others and implemented. All managers, whatever their precise roles are constantly involved in such decisions as how to use resources, determine production plans and investment priorities.

Decision making is the process of thought or deliberation that results in a choice. Like in other businesses, decision making in farm business is one of the most important activities that a Farm Manager has to carry out. It is important that Farm Manager should follow a gradual and sequential process in taking decisions. A wrong decision at a particular stage in production process can lead to total collapse of the farm business. The success of any farm manager will depend to a large extent on the right type of decision he made.

4.3.2 The Process of Decision Making

There are seven essential steps that must be followed when making decision in Farm Management:

The important steps in the decision-making process are:

1. Identification and definition of problem.
2. Collection of relevant data arid information.
3. Identification and analysis of alternative solutions.
4. Making the decision by selecting the best, alternative.
5. Implementing the decision.
6. Observing the results and bearing responsibility for the outcome

1. Identification and definition of problem

Find the precise problem- it is necessary first to realize that a problem exists and that a solution is needed if one is to be able to think logically about it. This may entail deciding how much to produce, how to produce, what to produce and when to produce. Managers face these basic challenges. When managers identify something that are not the way they should be, it becomes a problem. Good problem definition will minimize the time required to complete steps of decision-making process.

2. Collection of relevant data arid information.

Define the most likely solutions to the problems - All courses of action should be listed. The more important the decision, the more important it is for managers to spend time searching for and examining possible solutions so that decision is made with reliable facts rather than guesses, and within the framework of both available resources including time and the policy of the organization. Once the problem has been identified and properly defined, the next step is to gather data, information and facts followed by making observation pertaining to the specific problem.

3. Identification and analysis of alternative solutions. Evaluate the qualitative effects of each likely solution - Alternative solution will usually have several effects that are hard or impossible to quantity. For such, examine their qualitative effects. Each alternative should be analyzed in a logical and organized manner to ensure accuracy and to prevent some things being overlooked.

4. Making the decision by selecting the best, alternative.

Decide the best solution - Choose which alternative to accept. Despite uncertainties, a decision should be made if as much information is available as can be obtained within a reasonable cost and time limit. A decision is normally better than none at all postponing the decision is the same as deciding to continue with the existing situation.

5. Implementing the decision.

Take Action - It is useless to make a decision if it is not effected. An action must be taken to apply the decision to the problem, it must be communicated to all concerned.

6. Review the results of the action - The decision will normally have been based on incomplete information and even the 'facts' obtained may change. It is important therefore to observe and measure the results of effecting the decision. This will not only enable remedial action to be taken, it necessary, it should also help to improve future decision and to avoid repeating mistakes.

7. Observing the results and bearing responsibility for the outcome.

The manager or the decision maker should be responsible for his actions. The reluctance to bear responsibility may explain why some managers find it difficult to take decisions. But since it is difficult for managers or decision makers not to take decision, then they will be responsible for any decision taken. Careful observations and analysis will result in additional information, allow corrections to be made, and improve future decisions. Managers should always try to learn from their past mistakes. Two important aspects of this control stage are monitoring and evaluation.

4.3.3 Types of Farm Management Decisions

There are many decisions and/or problems confronting farmers on the farm. The solutions to these problems will determine to a large extent whether a farmer or farm manager is going to be successful or not. The types of problems facing Farm Management include the following:

(a)What Size of Farm to Operate?

The solutions to this will depend on many factors like the type of crop cultivated or type of animal reared the amount of resources available, land tenure system of the area, type of equipment available etc.

(b)What Combination of Crops and Livestock to Produce?

The solution to this will depend on whether the farmer wants to go on mixed farming or mixed cropping, it will also depend on the value system of the area and some other factors.

(c)What System of Farming should be followed?

The available system of farming include: mono cropping, mixed cropping, mixed farming. For animal rearing we have – intensive, semi – intensive and extensive systems.

(d) What is the most Profitable Method of Production given the available Resources? (e) What kinds of Machinery and Equipment to use and at what level of Production do we substitute Machinery for labour.

(f) How much of Family Labour and how much of Paid Labour to use?

This will be determined by the total population of the family and the number that will be available for farming at various period of the year.

(g) What are the appropriate Times to Produce Specific crops or Livestock?

Farmers need to decide whether to produce certain crop or livestock during occasions when they will be highly demanded. For example, poultry farmer can decide to target the sales of his broilers during occasions like: New Year, Easter and Sallah celebrations.

(h) How much of the crops and livestock to consume at home and how much of these to sell?

(i) Selling price of the farm products and what are the problems of marketing?

(j) What are the sources of credit open to a farmer and how can he make proper use of the available credit?

4.3.4 Functions of Farm Manager?

Given the problems and/or decisions faced in Farm Management, the farm manager or management must be prepared to carry out the following functions in agricultural production: planning, forecasting, organizing, co-ordinating, staffing or personnel management, directing and leading, communicating, motivating and supervising.

Which function is most important?

They are all important and emphasis should be laid on different aspects according to need.

1. Forecasting

Once the idea of establishing a farm business is conceived, forecasting begins in term of expected quantities to produce, the price to set, the costs of farm inputs and the likely profits. Projections are also made on the basis of economic indicators such as population, age distribution, levels of income, government plans to increase employment or raise incomes, tastes and preferences.

2. Planning

Forecasting is the beginning of planning which must be done. On the basis of forecasts the farm manager can increase his output. The plan which some people call budget, contain every detail of how much to make, at what price to sell, what profits are expected, the obligations to workers and consumers.

The annual budget is a general statement, but the monthly budgets are more detailed. Planning sorts out who will do what and in planning, all levels of workers must be involved.

3. Organizing

In organizing, responsibilities are defined and lines of authority are laid down. Organisation involves delegating authority and holding specific people responsible for making sure that specific things are done.

4. Co-ordinating

Co-ordination is essential since farm business is segmented into various enterprises each doing its own bit. The work of all the segments must be harmonized so that no section is delayed by lack of appropriate activity in another section. Coordinating is done by bringing all head of sections into the picture through communication. General meetings announced and discussed by the farm manager.

5. Motivation

In order to make the work of co-ordination and controlling easy, farm workers must be properly motivated through humane treatment. As a farm manager, you should always put yourself in the position of farm workers. Take pains to explain what you want them to do. Make the instructions clear and simple. Create the right atmosphere.

Motivation can be achieved in many ways. A simple note of appreciation or praise

(commendation) for a good job done will encourage the workers to put more effort in future. Financial incentive provides encouragement for harder work. Individuals may excel if direct payments are made in recognition of their individual performance.

6. Staffing

This is a function carried out by the farm manager. It involves decision on job content, qualification required, training on the job and evaluation of performance in order to recommend for promotion or wage increase.

7. Directing and Leading

It is the duty of farm manager to lead the farm workers in the implementation of the chosen plan. Leadership entails outstanding character that commands the respect of all workers. A good leader must be very knowledgeable, mature in thought and action with balanced judgment and decisions which are generally satisfactory to most farm workers. Leaders must accept responsibility for their actions and must be firm.

8. Communication

Communication is an important aspect of Farm Management. The function of communication involves passing information from the farm manager to the farm workers and the general public.

A clear channel of communications must exist between the manager and the farm worker.

Instructions must be clearly given and feedback collected. In order to avoid rumours and false information, it is the duty of farm manager to ensure workers confidence by passing direct information to them.

9. Control and Supervision

After planning, the next most crucial function of farm manager has to do with controlling and supervision. For any business to succeed, every stage or activity must be controlled. There is production control, inventory control, cost control, budgetary control and personnel control.

The process of controlling involves comparing plan with achievements.

Self-assessment exercises:

1. **State the steps in decision making**
2. **Differentiate between coordinating and motivating.**

4.4 Conclusion

In Unit 4, we have learnt about the decision-making functions of farm manager. In conclusion, a farm manager should aim at making the business of what the customer needs his priority and endeavour to provide those things better than has been previously done by other farmers. Any farm business which satisfies this will make profit as a matter of course.

4.5 Summary

In this Unit, we have learnt that:

· Decision making involves making a choice from the various lines of action

· Decision making follows processes in Farm Management, decision making process which involved seven essential steps.

· The steps in decision making process include: identify the problem, define the problem, suggest solutions, analyse those solutions, choose the best solution, implement decision and evaluate result.

· There are many decisions and or problems confronting farm manager. These decisions require that he must have a good understanding of the farm practices relevant to the enterprises he wish to be involved in.

· Farm manager must be ready to draw up both short and long term plan. This would include the objectives of the business, how objectives will be achieved and the stages of business expansion.

· Farm manager must ensure that needed farm inputs – land, buildings, machinery, etc, are available or can be obtained with cash resources at his disposal.

· It is also the duty of farm manager to ensure that there is ready market for the output of the farm business.

· Farm manager performed administrative functions such as – staffing, motivation, communication, etc which are essential for the healthy growth of the business.

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4.7 Possible Answers To Self-Assessment Exercises

Answers:

1. State the steps in decision making

The important steps in the decision-making process are:

1. Identification and definition of problem.
2. Collection of relevant data arid information.
3. Identification and analysis of alternative solutions.
4. Making the decision by selecting the best, alternative.
5. Implementing the decision.
6. Observing the results and bearing responsibility for the outcome.

2.

Co-ordinating:

Co-ordination is essential since farm business is segmented into various enterprises each doing its own bit. The work of all the segments must be harmonized so that no section is delayed by lack of appropriate activity in another section. Coordinating is done by bringing all head of sections into the picture through communication. General meetings announced and discussed by the farm manager.

Motivation:

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Module 2

The Common Concepts And Tools In Farm Management

Unit 1 Economic Principles and Farm Management
Unit 2 Farm Cost
Unit 3 Valuation and Depreciation of Farm Assets
Unit 4 Literate versus Illiterate Farmers in Farm Management

Unit 1 Economic Principles And Farm Management

Contents

1.1 Introduction

Dear students I welcome you to Unit 1 in Module 2 of this Course AEA308 Principles of farm management. In the last unit we learnt about the meaning, nature and scope of Farm Management in module 1. We also treated the principles and functions of Farm Management. In this module, you will learn about some common concepts and tools in Farm Management. This unit is specifically devoted to discussing some economic principles as it affects Farm Management.

1.2. Learning Outcome

By the end of this unit, you should be able to explain the following economic principles:

· Diminishing returns
· Substitution
· Opportunity Cost
· Diversification and specialization

1.3 Main Content

1.3.1 The Law of Diminishing Returns

The law of diminishing returns is also known as the law of variable proportions. Diminishing returns is the most observed phenomenon in production for most inputs especially at normal production level.

The law of diminishing returns states that if the quantity of one variable factor is increased by equal amount while the quantity of other factors are kept constant, the corresponding increment to total product (output) will start to increase up to a certain point (the point of inflection) and will continue to decrease from that point. This certain point referred to, is the maximum point on the marginal product curve which coincides with the point of inflexion of the total product curve. For instance, fertilizer, labour and planting materials are variable inputs that can be combined with fixed input such as land to raise output. As fertilizer application is increased, the total return will increase at first but will eventually decline to a point where no extra return is obtained for extra fertilizer applied.

Thus, this law is useful in determining the level of input use. It is a law of fundamental importance in agriculture because the law describes the relationship between output and a variable input when other inputs are kept constant. In short, the law is helpful in making decisions as;

(i) The level at which yield per hectare should attain maximum profit.

(ii) The size of the farm one should operate with given resources of capital, labour and management.

(iii) The amount of fertilizer, labour feed etc. one should use at the farm size for a production unit.

The principle of diminishing returns is one of the most important concepts in Farm Management; it is the principle that determines the economic level of all production practices. This principle guides the efficient allocation of resources.

As one of the aims of farm business is to make profit, every production process needs to be considered in the framework of costs and returns.

The diminishing return principle implies that if fixed cost remain constant, it is only profitable to increase the level of production if only the marginal return is greater than the marginal cost. In other words, it is better to employ additional fertilizer as long as the added return obtained by the employment of additional fertilizer is greater than the additional cost of employing the fertilizer.

This is a technical way of saying that it is profitable to spend one naira (N1) for a return of one naira fifty kobo (N1.50k) but not for a return of fifty kobo (50k) only.

1.3.2 The Principles of Substitution

The principle of substitution refers to the amount by which product A changes in quantity when product B is increased by one unit while the input remains constant. Farm manager is interested in the optimum combination of products that will enable him maximize net returns. The concept of Marginal Rate of substitution is central to choosing the optimum production combination. With the introduction of new technologies in agriculture, farmers are exposed to different methods or combination of methods of farming.

The major objective behind the principle of substitution is either to maximize output or minimize the cost of production. Farm manager need to decide upon the best possible resource combination to achieve maximum output at a given cost or to minimize the cost of producing a given output.

Examples of resource combinations to achieve maximum output with input use remaining constant include:

· Production of maize and poultry in a given plot of land.

Production of grain and fruit crop in one hectare of land.

· Production of farm and non – farm products using the same number of labourers.

The above examples will show how to produce maximum output where alternative products can be produced from the same resources, subject to certain constraints.

The principle of substitution is also used to find out the least cost combination of resources needed to produce a given output.

Examples include:

· Chemical and manual weeding in the production of a given quantity of yam.

· Substituting tractor for hand tools in the production of a given quantity of maize.

· Hay and maize combination for a constant output of milk.

· Combination of grain and hay for a given live weight gain.

The principle of substitution helps in choosing the most profitable combination of two or more resources or products. Thus, farmers are always faced with the decision on whether to employ one factor or the other. Through this, farmers will be able to combine the factors of production in the various proportions that would maximize his net returns.

1.3.3 Opportunity Cost

In agriculture, resources are limited but they have alternative uses. When resource is put to one use, the opportunities of other alternatives are lost. Opportunity cost refers to the value of the next best alternative foregone. The concept of opportunity cost is the economists‟ way of expressing the cost of present benefit in terms of forgone alternatives. The opportunity cost of a Farm Management decision is the

amount of money which is given up by choosing one alternative rather than another. Economic resources are scarce and the scarcity necessitates a choice between alternatives. A choice means you have one thing or another. It implies sacrificing one thing in favour of another. If you decide to have more of one thing, then where there is an effective choice, it will be necessary for you to have less of the other. The cost of anything is not the money spent on it; it is the alternative, which was most nearly chosen instead.

If a farmer decides to grow rice instead of maize, the opportunity cost of rice he cultivated is not only the maize which he might have grown instead, but also the market situation. The concept of opportunity cost is of importance to him because it reveals the real cost of his decision to grow the rice.

The application of the concept of opportunity cost to every economic decision helps individual consumer to maximize their satisfaction. The concept of opportunity cost is of importance in farm Management because it helps farmers in deciding which enterprise to go into, taking into consideration some of the resources available. The concept is also essential for working out efficient farm organisation for efficient utilization of farm resources. The main point of the opportunity cost concept is that alternative investments must be taken into consideration if maximum returns on resources invested are to be obtained.

In Farm Management, for farmers to obtain maximum returns, the money that is given up by choosing one alternative rather than another must be less than the chosen enterprise.

For instance, if the same amounts of resources are available for the production of one hectare of either maize or sorghum and the expected revenue from maize is N1000 while the expected revenue from sorghum is N800. If sorghum is chosen instead of maize, i.e. we forego N1000 in order to obtain N800.

Here, the opportunity cost is positive and should be avoided if there is no serious case against the production of maize. On the other hand, the opportunity cost of cultivating maize rather than sorghum is negative i.e. we forego N800 to obtain N1000 and thus a good decision.

1.3.4 Diversification and Specialization

Specialization involves the production of one type of product. Farmer may specialize in poultry production only, he may also decide to engage in palm production only etc. By specialisation, the farmer may likely be more efficient in his operations and techniques of the business.

However, specialization is always accompanied with risks because once the business fails; there is no other way of producing other products.

Failure can occur as a result of pest and disease outbreak, market situation and some other factors.

Diversification on the other hand involves combination of two or more products or enterprises in one operation. For instance, a farmer can engage in the production of maize, sorghum and poultry at the same time. He may also engage in the production of grain and oil palm plantation, etc. The rule guiding the operation of diversification is that the two enterprises must not be correlated in income. If two farm enterprises require the same resources and are likely to be affected by the same condition, a reduction

in the gross margin of one enterprise will imply a similar reduction in the gross margin of the other enterprise.
This is a situation of positive correlation. It is therefore, beneficial to diversify into enterprises which have negative correlation coefficient of gross margin. This is necessary to reduce the effect of risk and uncertainty connected with farming. Diversification allows flexibility in the use of resources and lowers income variability.

Self-Assessment Exercise 2

1. **State the law of diminishing returns.**

2. **Explain the principle of substitution.**

1.4 Conclusion

In this unit, you have learnt about the economic principles that can be applied to Farm
Management. From the various discussions, we have gathered that the sound knowledge of these principles are essential in Farm Management. This is necessary to guide farmers in taking rightful decisions in farm operations.

1.5 Summary

In this unit we have learnt that:

· The concept of diminishing returns determines the economic level of all production practices.

· The principle of diminishing returns guides in the efficient allocation of resources. · The principles of substitution helps farmers in deciding on the optimum combination of products that will enable him maximize net revenue.

· The concept of substitution aimed at both maximization of production output as well as minimization of cost of farm inputs.

· The opportunity cost of a Farm Management decision is the amount of money which is given up by choosing one alternative rather than another.

· Specialization involved the practice of one enterprise while diversification involved the practice of two or more enterprises.

· Farmer will be more efficient in the use of resources under specialization but it amount to putting all his eggs in one basket.

· Diversification can guide against total failure if enterprises with negative correlation in gross margin are combined.

1.6 References/Further Reading/Web Sources

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1.7 Possible Answer To Self-Assessment Exercise(S) Within The Content

Answers:

1.
The law of diminishing returns states that if the quantity of one variable factor is increased by equal amount while the quantity of other factors are kept constant, the corresponding increment to total product (output) will start to increase up to a certain point (the point of inflection) and will continue to decrease from that point.

2.
The principle of substitution refers to the amount by which product A changes in quantity when product B is increased by one unit while the input remains constant. Farm manager is interested in the optimum combination of products that will enable him maximize net returns. The concept of Marginal Rate of substitution is central to choosing the optimum production combination. With the introduction of new technologies in agriculture, farmers are exposed to different methods or combination of methods of farming.

Unit 2 Farm Cost

2.1 Introduction

Dear students I welcome you to Unit 2 in Module 2 of this Course AEA308 Principles of farm management. In the last unit, we discussed the economic principles that influence Farm Management decisions. Such principles include: diminishing returns, substitution, opportunity cost and specialization and diversification. In this unit, attempt will be made to define cost, explain the various types of cost and discuss the implications of costs in Farm Management.

2.1 Learning Outcome

By the end of this unit, you should be able to:
Define cost
· Explain the different type of cost
· Calculate the average costs of farm expenses
· Classify the different farm expenses into fixed and variable costs · identify the implications of costs in Farm Management.

2.3 Main Content

2.3.1 Meaning of Cost

Costs or costs of production are payments or expenses made either directly or indirectly to obtain the inputs utilized in production.
According to Nweze (2002) cost is a sacrifice that must be made for the purpose of doing or acquiring something. The sacrifice that must bem made may be tangible or intangible, objective or subjective and may take many forms such as money, goods, leisure time, income, security, prestige, power or pleasure. Agricultural cost is referred to as the value of agricultural inputs used in the production of agricultural output. That is, the cost of producing a product such as yam, maize, eggs, goats, cattle, etc. It is also known as expenses incurred in producing a particular amount of product in a particular period. Hence, one can talk of the cost of producing 100 tons of yams in a season or 2000 litres of milk per week or 2000 crates of eggs per laying

circle.
Cost of production can also be referred to as accounting cost, cost of materials used in the production process such as labour costs, fertilizer costs, feed costs, depreciation costs, maintenance and repair costs, selling and administrative costs, taxes and interest payments on money borrowed.
An agricultural economist view costs of production as embracing a considerable alternative costs or opportunity cost. For instance, if a farmer produces only commodity A and no B, the cost of producing commodity A is the accounting cost plus the foregone return on commodity B known as economic costs. Total cost can be calculated thus: Total Cost (TC) = Fixed Cost (FC) + Variable Cost (VC)

2.3.2 Types of Costs

In considering costs involved in agricultural production, Abbott and Makeham (1980) identified five main farm costs. These are:
· Variable Costs
· Overhead (fixed) Costs
· Financial Costs
Capital Costs, and
· Personal Costs

Variable Costs

Variable Costs are expenses which vary in size positively with variation in output level. Variable Cost rises and falls with output and is zero when the farmer is not producing. It is therefore sometimes called direct cost.
Variable costs include: The raw materials, the cost of direct labour, the running expenses of fixed capital such as fuel, ordinary repairs and routine maintenance, insurance on crops and animals.
Variables costs are directly associated with the level of intensity of each activity, but may also determine the yield or level of output of the activity. For instance, the amounts and kinds of fertilizer, seed and cultivation in a crop enterprise, largely determines the crop yield. Similarly, in an animal enterprise, the level and type of feed and medicines used have a major effect on the productivity of any given type of animal. Therefore, for a farmer to obtain high output on the farm, requires that he must be ready to spend much money on variable cost items. The reason for identifying the variable costs of a farm business is to give the farmer an idea of the size of the change in terms of cost which will occur if he expands or contracts one or more of the enterprises.
Knowing the likely variable costs and gross income, the farmer is in the position to make a quicker decision of the merit or otherwise of making a change in the enterprise.

Overhead (Fixed) Costs

Overhead cost is also known as fixed cost. Fixed costs are costs which do not vary with the level of output. In other words, fixed cost is the same

regardless of the level of production. Apart from being fixed, another characteristic of fixed cost is that it must be incurred even when no output is yet forthcoming. Thus, a businessman must erect a factory, office buildings and hire staffs even before the factory starts production.
Abbott and Makeham (1980) identified three types of overhead costs to include: total overhead, operating and activity costs.

i. Total Overhead Costs

These include the following: essential living expenses of the farmer, wages and food for permanent workers, loan interest and repayments, replacement of capital items such as plants, machinery, buildings, all taxes, repairs to water supply, insurance on employees, travel and other business expenses.
The main advantages of farmer knowing the level of total overhead costs are that: They are unavoidable costs which must be met every year. Secondly, it is used to show the gross margin which must be achieved for all farm activities in the planting season. Lastly, the total gross margin is normally the only source other than additional borrowing from which the overhead cost can be met.

ii. Operating Overhead Costs

According to Abbott and Makeham (1980), operating overhead costs are used in calculating the true profit in an accounting sense. They are overheads associated with the annual business operations of the farm.
The main component of operating costs include: Operator‟s allowance, depreciation of capital items such as buildings and machines, wages of permanent workers, taxes but not income tax, repairs of water supply, roads, buildings and structures, insurance on buildings, plant, fixed structures, etc, telephone and business expenses.

iii. Activity Overhead Costs

These are costs which will not be incurred if the business is terminated.
Examples of such costs include: depreciation on equipment used. Costs under this category are regarded as partly fixed and partly variable.
Even though they are classified as fixed costs, the amount to be fixed is determined by the level of operation or use of the equipment.

Finance Costs

These covers the annual interests paid on borrowed money and the repayment made on loans where hired purchases are made. These types of costs are associated with loan repayment and insurance costs lumped together in one sum.

Capital Costs

These costs are usually associated with costs incurred in the process of providing capital assets used in farm production. Examples of these costs include costs on capital project like building, machinery, land purchase, land clearing, water supply, extra livestock and planting of palm trees, rubber, and cocoa or fruit trees.

Personal Costs

Purchased food, clothing, medical expenses, school fees, and family traveling costs are considered as personal costs.

In some cases, some of these items are directly related to the level of output of the farm. For example, an ill or undernourished farmer is not likely to have a high work output and money spent on food or medicine is likely to have a direct effect on total farm output. The minimum total living or personal costs of the farm are normally included in the total overhead. When budgeting for family farm, they are one of the most important and unavoidable items in the total farm costs.

3.3 Average and Marginal Costs

Average Cost

Average cost is the total cost of producing an output divided by the number of output units.

Average Cost = Total Cost = TC

Total Product Q Where:

TC = Total cost and Q = units of output produced

Average Cost is the sum of Average Fixed Cost (AFC) and Average Variable Cost (AVC)

Average Cost = Average Fixed Cost + Average Variable Cost

AC = AFC + AVC

Average Fixed Cost (AFC) is obtained by dividing Total Fixed Cost (TFC) by the unit of output associated with it.

Average Fixed Cost = Total Fixed Cost = TFC

Total Product Q Where:

TFC = Total Fixed Cost and Q = units of output.

For example, with an output of 100 units and a total fixed cost of N300.

Average Fixed Cost = Total Fixed Cost = N300

Total Product N100

= N3

Similarly, Average Variable Cost (AVC) is obtained by dividing the Total Variable Cost (TVC) by the units of output produced.

For example, if a farmer produced an output of 160 tons using a total variable cost of N480.

Calculate the average variable cost.

Answer:

Average Variable Cost = Total Variable Cost = N480

Units of Output 160

= N3.0

Marginal Cost

Marginal Costs (MC) also known as incremental costs refer to the additional cost that can be incurred due to the production of additional unit of output. It is the increase in total cost resulting from increasing the output by one unit.

Marginal Cost (MC) = Change in Total Cost = D TC
Change in Total Product DQ

2.3.3 Implications of Costs in Farm Management

Usually, profit maximization is the motive of any farmer. Thus, profit is obtained by subtracting *costs* from *revenue*. In this case, it is important for farmer to understand the nature and structure of production costs and how they affect the decision making process.

Secondly, cost functions usually help the producers to determine the most profitable level of production i.e. the output which gives the maximum profits as well as the level of output in which production process depends. Consequently, costs functions help the farmer to determine how much variable factor to be employed in combination with fixed factors in the production of an output for maximum benefit.

Self-Assessment Exercises:
1. Explain the following costs concepts:
i. Finance Costs
ii. Capital Costs
iii. Personal Costs

2. Explain the implications of costs in farm management.

2.4 Conclusion

In unit 2, we discussed the various types of costs associated with farm business. The conclusion that can be drawn from this unit is that deep knowledge of farm costs is a must for all serious-minded farmers.

No farmer can succeed without the knowledge of the various farm costs. Without record of farm costs he will not be able to find his profit and decisions will be difficult to make.

2.5 Summary

In this unit, we have learnt that:

i. Total Cost (TC) is a sum total of Total Fixed Cost (TFC) and Total Variable Cost (TVC) i.e. TC = TFC + TVC.

ii. Total Variable Costs are the costs of production that varies according to the level of production.

iii. Total Fixed Costs or Overhead Costs are the costs that remained the same regardless of the level of production.

iv. Overhead Costs can be classified into three categories – Total Overhead Costs, Operating Overhead Cost and Activity Overhead Cost.

v. Average Cost is obtained by dividing Total Cost of an output by the number of output units. Alternatively, Average Cost is the sum total of Average Fixed Cost and Average Variable Cost. vi. Average Fixed Cost is obtained by dividing Total Fixed Cost by the unit of output.
vii. Similarly, Average Variable Cost is obtained by dividing the Total Variable Cost by the unit of output.
viii. Marginal Cost or incremental cost is obtained by dividing the change in Total Cost by the change in Total Product. ix. The concept of farm costs is very important in taking decisions about farm organisation. x. Farm costs are also useful in farm planning, especially in the determination of the gross margin and the farm profit which are also important in farm budgeting.

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1.7 Possible Answer To Self-Assessment Exercise(S) Within The Content

Answers:
1. Explain the following costs
i) Finance Costs
ii) Capital Costs
iii) Personal Costs

i). Finance Costs

These covers the annual interests paid on borrowed money and the repayment made on loans where hired purchases are made. These types of costs are associated with loan repayment and insurance costs lumped together in one sum.

ii). Capital Costs

These costs are usually associated with costs incurred in the process of providing capital assets used in farm production. Examples of these costs include costs on capital project like building, machinery, land purchase, land clearing, water supply, extra livestock and planting of palm trees, rubber, and cocoa or fruit trees.

iii). Personal Costs

Purchased food, clothing, medical expenses, school fees, and family traveling costs are considered as personal costs. In some cases, some of these items are directly related to the level of output of the farm. For example, an ill or undernourished farmer is not likely to have a high work output and money spent on food or medicine is likely to have a direct effect on total farm output. The minimum total living or personal costs of the farm are normally included in the total overhead. When budgeting for family farm, they are one of the most important and unavoidable items in the total farm costs.

2.Implications of Costs in Farm Management:

Usually, profit maximization is the motive of any farmer. Thus, profit is obtained by subtracting *costs* from *revenue*. In this case, it is important for farmer to understand the nature and structure of production costs and how they affect the decision making process.

Secondly, cost functions usually help the producers to determine the most profitable level of production i.e. the output which gives the maximum profits as well as the level of output in which production process depends. Consequently, costs functions help the farmer to determine how much variable factor to be employed in combination with fixed factors in the production of an output for maximum benefit.

Unit 3: Valuation and Depreciation of Farm Assets

3.1 Introduction

Dear students I welcome you to Unit 3 in Module 2 of this Course AEA308 Principles of farm management. In the last unit, we discussed the meaning of cost, types of farm cost and the calculation of average and marginal costs. We further discussed why the understanding of these cost are very important in Farm Management. Another important tools in Farm Management that will be discussed in this unit are farm valuation and depreciation of farm assets. In order to calculate the estimates of depreciation charges, you will need a calculator to assist you.

3.2 Intended Learning Outcomes

By the end of the unit, you should be able to:
· Define valuation
· Identify the common methods of valuation
· Define depreciation charges
· Explain the three common methods of estimating depreciation · calculate depreciation charges.

3.3 Main Content

3.3.1 Farm Valuation

Valuation involves setting value or attaching prices on property. When applied to farm business, valuation means setting prices on farm assets. Such assets may include: machines, buildings, livestock, growing crops at the end of accounting period, farm output in the store and unused farm inputs kept in the store. Valuation of farm assets is necessary to enable the farmer calculate his net worth at the end of accounting period or at any given period. Both the opening valuation and closing valuation form the major part of profit and loss in farm accounting.

Methods of Valuation

Various methods of valuing farm assets exist. The choice of method will depend on the purpose of the valuation. Farmer should be consistent in their method of valuation as this will not only affect the computed profit and loss but also the net worth of the farm.

The four most popular methods of farm valuation include:

· **Valuation at cost:** Computing with the actual cost of purchasing the farm assets.

· **Valuation at cost less depreciation charges:** This method used mainly for farm machineries and equipment.

Valuation at market price: Computing with the current market price of the farm asset.

· Valuation at cost or market price whichever is lower.

3.3.2 Definition of Depreciation Charges

Depreciation is the reduction in value of an asset through wear and tear.

While depreciation charges is the amount of money or an allowance set aside annually on farm assets on the ground that the use of farm capital assets is one of the costs of earning the revenues of the business.

Depreciation charge involves the spreading of the cost of an asset over its useful life. It is considered an annual expense and as such is regarded as variable cost. Depreciation charge is allowed according to special rules by the tax authorities.

The major advantage of depreciation is that it enables farmer to replace farm machines and equipment with ease i.e., without resulting into borrowing. Another advantage is that since depreciation is regarded as cost and is always made before the calculation of profit, it will seriously reduce the amount of tax paid by the business.

3.3.3 Methods of Estimating Depreciation Charges

There are three common methods of estimating depreciation charges.

These include: straight line method, the declining balance method and sum of the year digit method.

3.3.1 The Straight-Line Method

Straight line method is also called the fixed – installment method. This method of estimating annual depreciation charge involves deducting the estimated residual or scraps or salvage value of an asset from its original cost and the balance divided by the number of years of estimated life of the asset.

Mathematically:

Annual Depreciation= Cost of Asset – Estimated Salvage Value

Estimated Number of years of Life of Asset
Salvage value also known as scrap or residual value is the estimated value that an asset supposed to cost at the end of the year the asset is expected to be in operation. For instance, a farm asset that is expected to be totally discarded at the end of its useful life will have zero salvage value.

Working Example:
If an asset costs N10,000.00 and can be sold off in the next ten years for N2,000.00. Calculate the annual depreciation.
Answer:
Step 1: State the formula
Annual Depreciation = Cost of Asset – Salvage Value
The Expected Life of the Asset
Step 2: Find the value of the items in the formula
Cost of asset = N10, 000
Salvage value = N2, 000
Expected life of asset = 10 years

Step 3: Apply the formula

$$\text{Annual Depreciation} = \frac{\text{N10, 000 – N2000}}{\text{10 years}}$$

$$= \frac{\text{N8, 000}}{10}$$

= N800
What should be set aside every year for ten years = N800.
The major advantage of straight-line method is that it is easy and straight forward to calculate. However, the method is not very useful for assets like machines and equipment in which the rate of turnover decreases with age.

3.3.2 The Declining Balance Method
In the case of a reducing balance method of depreciation, the actual depreciation expense is set at a constant proportion of the cost of the asset. In other word, a certain percentage of depreciation is taken for every year and is applied to the balance at the beginning of each year.
This results into a diminishing annual absolute amount.
The major advantage of this method is that it depreciates assets according to the rate of their turnover. That is, depreciation charge is high when the asset is still new and with less repair and maintenance costs. However, there is usually problem of determining the exact percentage to use. Secondly, the salvage value of the asset cannot be determined before the expected life span of the asset.

Worked Example

If an asset costs N10, 000 and the rate of depreciation is 10 percent per annum and the asset is expected to last for five years. Calculate the annual depreciation charges.

Answer:

(i) Annual Depreciation for year 1
= 10% of N10,000
= 10 x N10000
100 1
= N1000

(ii) Annual Depreciation for year 2
Balance at the end of year 1 = N10000 – N1000 = N9000
= 10% of N9,000
= 10 x N9000
100 1
= N900

(iii) Annual Depreciation for year 3
Balance at the end of year 2
N9000 – N900 = N8100
= 10% of N8100
= 10 x N8100
100 1
= N810

(iv) Annual Depreciation for year 4
Balance at the end of year 3
N8100 – N810 = N7290
= 10% of N7290
= 10 x N7290
100 1
= N729

(v) Annual Depreciation for year 5
Balance at the end of year 4
N7290– N729 = N6561
= 10% of N6561
= 10 x N6561
100 1
= N656.1

Salvage Value

The salvage value is whatever is left at the end of its useful life i.e.
N6561 – N656.1 = N5904.10.

3.3.3 The Sum of the Years –Digits Method

This method like the declining balance method distribute depreciation expense more heavily in the early years of use and more lightly in later years. However, it has some advantages over declining balance method.
It avoids an undistributed balance at the end of the useful life and depreciates the investment to the scrap value assigned.
Sum of the year digits method involves working out a fraction with a denominator and a numerator which is applied to the value at the beginning of each year.

Finding the Denominator

For instance, if the life span of an asset is expected to be five years, the denominator will be the addition of the number of years i.e.
1 + 2 + 3 + 4 + 5 = 15
In this case, the denominator is 15.

Finding the Numerator

The numerator of the fraction is the number of years remaining at the end of the accounting period. From the above example, in year 1 – the numerator is 5 and the denominator is 15. in year 2, the numerator is 4 and the denominator is 15. Year 3, the numerator is 3 and the denominator is 15. In year 4, the numerator is 2 and in year 5 the numerator is 1. The denominator remains 15 throughout the period.

Work Example

If an asset costs N17, 000 and can be sold off in the next five years for N2000. Calculate the annual depreciation using sum of the year digits method.

Answer:

Step I: Getting the Denominator

1 + 2 + 3 + 4 + 5 = 15

Step II: Get the Fraction for Each Year

1 = 5/15 2 = 4/15 3 = 3/15 4 = 2/15 and 5 = 1/15

Step III: Calculate the Annual Depreciation

Value of Asset = Original Cost – Salvage Value
= N17,000 – N2,000
= N15,000

Year 1: $\frac{5}{15} \times \frac{N15,000}{1} = N5000$

Year 2: $\frac{4}{15} \times \frac{N15,000}{1} = N4000$

Year 3: $\frac{3}{15} \times \frac{N15,000}{1} = N3000$

Year 4: $\frac{2}{15} \times \frac{N15,000}{1} = N2000$

Year 5: $\frac{1}{15} \times \frac{N15,000}{1}$ = N1000

Total Depreciation = **N15, 000**

Total Value = Total Depreciation + Salvage Value
N15,000 + N2000
= N17, 000

3.3.4 Appreciation

Appreciation is the antonym of depreciation. Appreciation occurs as a result of increase in the value of an asset. Appreciation may occur through rising prices as a result of inflation, scarcity of the asset or increase in earning power. If after adding all the annual depreciation charges to the salvage value, the total value of the asset is more than the original cost, we have a case of appreciation of asset. If the addition of all the annual depreciation charges with salvage value is equal to the original cost then appreciation is zero i.e. there is no appreciation.

Conversely, the replacement cost of an asset may be very much greater than its original cost.
This problem is dealt with by revaluing assets at intervals or even annually using special capital cost indices and adjusting depreciation charges accordingly. This is called replacement – cost depreciation.

Self-Assessment Exercise 1:
What is farm valuation?

3.4 Conclusion

In this unit, you have learnt the meaning of valuation and the various methods of valuation. You have also learnt the meaning of depreciation. You have seen how to estimate depreciation charges using the three common methods. The knowledge of depreciation is very essential for farm business as this will guide him in future replacement of his farm assets. The knowledge of depreciation will also reduce the amount of tax paid by farmers on their farm business.

Self-Assessment Exercise 2:
If an asset costs N17, 000 and can be sold off in the next five years for N2000.
Calculate the annual depreciation using sum of the year digits method.

3.5 Summary

You have learnt in this unit that:
· Valuation involved attaching prices to farm assets.
· There are four methods used in setting prices to farm assets. These include: valuation at cost, valuation at cost less depreciation, valuation at current market price and valuation at cost or market price whichever is lower.
· The method of valuation adopted will depend on the situation at stake.
· Depreciation represents the cost of wear and tear of an asset as a result of its operation. · The three most popular method of depreciation include: straight line method, declining – balance method and sum of the year digits method.
· Sum of the year digits method combines the advantages of straight line method and declining balance method.
· Appreciation occurs if the sum of the depreciation value and salvage value is more than the original cost.
· Replacement – cost depreciation is necessary to take care of increase in the price of asset as a result of inflation.
· Depreciation is regarded as cost and therefore reduces the tax payable by farm business.

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3.7 Possible Answers To Self -Assessment Exercises Within The Content.

Answers:

1. Farm Valuation:

Valuation involves setting value or attaching prices on property. When applied to farm business, valuation means setting prices on farm assets.
Such assets may include: machines, buildings, livestock, growing crops at the end of accounting period, farm output in the store and unused farm inputs kept in the store. Valuation of farm assets is necessary to enable

the farmer calculate his net worth at the end of accounting period or at any given period. Both the opening valuation and closing valuation form the major part of profit and loss in farm accounting.

2. If an asset costs N17, 000 and can be sold off in the next five years for N2000.
Calculate the annual depreciation using sum of the year digits method.
Answer:
Step I: Getting the Denominator
1 + 2 + 3 + 4 + 5 = 15
Step II: Get the Fraction for Each Year
1 = 5/15 2 = 4/15 3 = 3/15 4 = 2/15 and 5 = 1/15
Step III: Calculate the Annual Depreciation
Value of Asset = Original Cost – Salvage Value
= N17,000 – N2,000
= N15,000

Year 1: $\frac{5}{15} \times \frac{N15,000}{1} = N5000$

Year 2: $\frac{4}{15} \times \frac{N15,000}{1} = N4000$

Year 3: $\frac{3}{15} \times \frac{N15,000}{1} = N3000$

Year 4: $\frac{2}{15} \times \frac{N15,000}{1} = N2000$

Year 5: $\frac{1}{15} \times \frac{N15,000}{1} = N1000$

Total Depreciation = N15, 000

Total Value = Total Depreciation + Salvage Value
N15,000 + N2000
= N17, 000

Unit 4: Literate Versus Illiterate Farmers In Farm Management

4.1 Introduction
4.2 Intended Learning Outcomes
4.3 Main Content
    4.3.1 Concepts of Literate and Illiterate Farmers
    4.3.2 Characteristics of Nigerian Agriculture
    4.3.3 The Effects of Illiteracy on Farm Management
4.4 Conclusion
4.5 Summary
4.6 References/Further Reading/Web Sources
4.7 Possible Answers To Self -Assessment Exercises Within The Content.

4.1 Introduction

Dear students I welcome you to Unit 4 in Module 2 of this Course AEA308 Principles of farm management. In the last unit, we explained the meaning of the concept valuation and the various methods used in the valuation of farm assets.

We equally defined depreciation and discussed the three most common methods of estimating depreciation. We worked through examples under each method. Finally, we differentiated appreciation from depreciation. In this unit, we will look at the issue of literate and illiterate farmers and their implications in carrying out Farm Management functions.

4.2 Intended Learning Outcomes

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

· State the meaning of illiterate farmer

· Explain who is a literate farmer
· List the characteristics of Nigerian agriculture
· Discuss the implications of farmer's education on Farm Management functions.

4.3 Main Content

4.3.1 Concepts of Literate and Illiterate farmers

Illiteracy is the inability to read or write. Illiterate farmers therefore, can neither read nor write. On the other hand, literacy refers to the ability to read, write and decode symbolic representations in order to ease communication between communicators irrespective of distance.

It is the acquisition of the literacy skill that gives people real share of Western Education.

Literacy limited to reading, writing and numeracy is generally regarded as traditional literacy.

It is the most common or orthodox form of literacy.
As a rule, any farmer who attended schools and obtained a minimum qualification of primary school certificate or its equivalent may be regarded as literate farmer.

4.3.2 Characteristics of Nigerian Agriculture

Farming which is regarded as the art of tending crops and rearing animals is the major occupation of most rural communities in Nigeria.
The following are the major characteristics of Nigeria agriculture:

· **High Level Illiteracy**

Nigerian agriculture is characterized by high level illiteracy. A greater population of Nigerian farmers can neither read nor write. This high level of illiteracy posed a great problem in the area of extension service.
Hence, this slow down the rate of development as it has been established that there is positive relationship between the level of education of the populace and the rate of development.
Illiteracy affects the adoption of new innovations and new technologies.

Small Farm Size

Another important characteristic of Nigerian agriculture is the small size of the farmland per farmer. Over 70 percent of Nigerian farmers have an average farm holding of less than 5 hectares. This is called subsistence agriculture. With the small nature of the farm holdings farmers can only produce for himself and the family consumption with very little for market. Apart from the small size of the farm holding, farmers equally engaged in the planting of many crops depending on the need of the family. This small size impedes the mechanization of farmland.

· **Fragmented Farmland**

It is a common practice in Nigeria for farmers to own up to three or more farmland. These farmlands are scattered all over different locations. A typical Nigerian family may have an early yam and rice plots in the farm land, grains and late yam in another area.

Poor Technology

Nigerian agriculture is characterized by the use of crude implements.
Most Nigerian farmers depend on the use of hoe and cutlass to cultivate their farmland. Farm mechanization is still largely restricted to Government farms and some few wealthy individuals who can afford it.
Modern farm inputs are still beyond the reach of poor farmers. This explains why most Nigerian farmers still practice subsistence agriculture.

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Low Level of Investment
Low level of investment is one of the major characteristics of subsistence agriculture. Traditional farmers depend mostly on family labour, crude implements and the little savings at their disposal to produce. Due to their high level of illiteracy, most of them have no access to formal credit institutions. To compound the situation, the little credit available to them is often diverted to non-farm uses.

Low Level of Output
The small size of traditional farms, coupled with poor technology and low level of input collectively contributed to the low level of production output. Farmers produced mainly for domestic use and little for export.
Farmers‟ output is subject to his farm size, family labour and the type of farm implements used. Since most farmers are poor, the level of investment in agricultural production is generally low and therefore, their output will equally be low.

4.3.3 The Effects of Illiteracy on Farm Management

We have already seen that subsistence agriculture is peculiar to illiterate farmers while commercial agriculture is synonymous with literate farmers. Most of our discussions could best be applicable to commercial agriculture where profit is the ultimate goal of the farm enterprise.
Some of the effects of illiteracy on Farm Management include the followings:

(i) One of the characteristics of illiterate farmers is the small farm holding. This small farm size posed a serious problem in Farm Management in the area of determining the level of production, farm labour to employ and farm inputs to use.

(ii) Another effect of illiteracy on Farm Management is the low level of technology and over dependence on the traditional method of farming. Modern commercial agriculture demands the use of modern farm inputs and new technology. For farm plan and decisions to work perfectly well, modern methods of farming must be adopted.

(iii) Most illiterate farmers do not want to take any costly risk and therefore, do not put their savings in long-term investments such as plantation agriculture. This will affect decisions on how to select the best combinations of activities to produce the food supply and cash incomes needed to cover essential household needs.

(iv) Illiterate farmer produces mainly for his family use only and only little for sale. This has serious effect on the volume of farm product for sales and even the type of farm product to produce.

Self-Assessment Exercises:
1. Discuss the effects of illiteracy on Farm Management functions.

2. What are the characteristics of Nigerian Agriculture?

4.4 Conclusion

In this unit, you have learnt the meaning of literacy and illiteracy as they apply to farmers. We also discussed the characteristics of Nigerian agriculture and the effects of illiteracy on Farm Management functions.
It was then concluded that, illiteracy has serious effect on Farm Management decisions.

4.5 Summary

You have learnt in this unit that:

1. Those that could neither write nor read are regarded as illiterate.
2. Literacy is the ability to read, write and understand symbols.
3. Nigerian agriculture is characterised by high illiteracy level.
4. Most Nigerian farmers own small plots of farmlands and scattered in different locations.
5. Nigerian agriculture still depends largely on the use of crude implements.
6. Most Nigerian farmers produced only for his family consumption with very little for sales. 7. Illiteracy affects management decisions and therefore, affects the achievement of goals of Farm Management.

4.6 References/Further Reading/Web Sources

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4.7 Possible Answers To Self -Assessment Exercises Within The Content.

Answers:

1.
The effects of illiteracy on Farm Management include the followings:

(i) One of the characteristics of illiterate farmers is the small farm holding. This small farm size posed a serious problem in Farm Management in the area of determining the level of production, farm labour to employ and farm inputs to use.

(ii) Another effect of illiteracy on Farm Management is the low level of technology and over dependence on the traditional method of farming. Modern commercial agriculture demands the use of modern farm inputs and new technology. For farm plan and decisions to work perfectly well, modern methods of farming must be adopted.

(iii) Most illiterate farmers do not want to take any costly risk and therefore, do not put their savings in long-term investments such as plantation agriculture. This will affect decisions on how to select the best combinations of activities to produce the food supply and cash incomes needed to cover essential household needs.

(iv) Illiterate farmer produces mainly for his family use only and only little for sale. This has serious effect on the volume of farm product for sales and even the type of farm product to produce.

2.
The following are the major characteristics of Nigeria agriculture:
· High Level Illiteracy
Nigerian agriculture is characterized by high level illiteracy. A greater population of Nigerian farmers can neither read nor write. This high level of illiteracy posed a great problem in the area of extension service. Hence, this slow down the rate of development as it has been established that there is positive relationship between the level of education of the populace and the rate of development.
Illiteracy affects the adoption of new innovations and new technologies.

Small Farm Size
Another important characteristic of Nigerian agriculture is the small size of the farmland per farmer. Over 70 percent of Nigerian farmers have an average farm holding of less than 5 hectares. This is called subsistence agriculture. With the small nature of the farm holdings farmers can only produce for himself and the family consumption with very little for

market. Apart from the small size of the farm holding, farmers equally engaged in the planting of many crops depending on the need of the family. This small size impedes the mechanization of farmland.

· **Fragmented Farmland**

It is a common practice in Nigeria for farmers to own up to three or more farmland. These farmlands are scattered all over different locations. A typical Nigerian family may have an early yam and rice plots in the farm land, grains and late yam in another area.

Poor Technology

Nigerian agriculture is characterized by the use of crude implements. Most Nigerian farmers depend on the use of hoe and cutlass to cultivate their farmland. Farm mechanization is still largely restricted to Government farms and some few wealthy individuals who can afford it. Modern farm inputs are still beyond the reach of poor farmers. This explains why most Nigerian farmers still practice subsistence agriculture.

Low Level of Investment

Low level of investment is one of the major characteristics of subsistence agriculture. Traditional farmers depend mostly on family labour, crude implements and the little savings at their disposal to produce. Due to their high level of illiteracy, most of them have no access to formal credit institutions. To compound the situation, the little credit available to them is often diverted to non-farm uses.

Low Level of Output

The small size of traditional farms, coupled with poor technology and low level of input collectively contributed to the low level of production output. Farmers produced mainly for domestic use and little for export. Farmers‟ output is subject to his farm size, family labour and the type of farm implements used. Since most farmers are poor, the level of investment in agricultural production is generally low and therefore, their output will equally be low.

Module 3 Inputs of Farm Management

Unit 1 Land

1.1 Introduction

Dear students I welcome you to Unit 1 in Module 3 of this Course AEA308 Principles of farm management. In unit 4 of module 2, we discussed the relationship between literate and illiterate farmers in carrying out Farm Management functions. In the unit, attempt was made to differentiate between literate and illiterate farmers. We also discussed the characteristics Nigerian agriculture. We finally looked at the effects of illiteracy on Farm Management decisions.

1.2 Learning Outcome

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

· define land resources
· list the characteristics of land
· describe land management practices
· explain why there is variability in land cost.

1.3 Main Content

1.3.1 Definition of Land

The term land loosely refers to the soil that is used or to be used for cultivation. Land has a wider meaning and it includes not merely soil in the ordinary sense of the term but the whole of the material and the forces which nature gives for man‟s aid in land, water, air, light and heat. In other words, many things such as sunshine, rain, wind, waterfalls, seas, rivers, minerals etc, are included in it. Everything given free by nature

and economically useful to man is included in it. Thus, the term land in economics denotes all natural resources available to man for producing wealth.
Land could be defined as a farm resource given by nature. Land resources include the following: Soil, minerals, forests, fishing grounds and climates. All resources that exist naturally and contribute to the production of farm output are classified as land.
From the point of view of agriculture, land is the most important factor of production. No agricultural production can take place without land.

1.3.2 Characteristics of Land

1. **Land is a gift of nature:**
The supply of land comes from the nature. No human effort or sacrifice was necessary originally to produce land. That is why land has no cost of production for the society.
2. **Limited in Supply:** The quantity of land given is limited. Its supply can be neither increased nor decreased by any human effort. Hence economists remark that land has no supply price.
However, the money paid for the use of any parcel of land is what we call rent.
3. **Land is Heterogeneous:** Land like the other factors of production differs from one another in nature, fertility and productivity.
4. **Land has multiple uses:** Land is used for a variety of purposes like cultivation, animal rearing, building, and playground and so on. As it is demanded for multiple purposes, its demand exceeds the supply.
5. **Land is Subject to the Operation of law of diminishing Returns:** The constant and continuous cultivation of the land, with more application of labour and capital results in diminishing yield from the land.
6. **Land is not destructible:** Land can neither be destroyed nor created. Whenever, a farmer uses the land, he makes use of its productive capacity. By using the land, the farmer cannot destroy the land.
7. **Land is Passive and immobile:** Land is a passive factor of production and cannot produce anything of its own except if it is worked upon. Also land is fixed at a location and cannot be moved.

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1.3.3 Land Management Practices

Two major steps are usually taken to maintain the productivity of land:

a. **Physical Measures:** These consist of construction of ridges or contours and planting of crops or trees on these ridges.

b. **Cultural Measures:** These measures include the avoidance of vulnerable areas like bank of rivers, steep slopes, planting of cover crops and shade trees, crop rotation, application of fertilizers and compost manure, etc.

Land for the production of crops and rearing of animals is not however, homogeneous. What can be produced from a particular piece of land depend on a number of factors namely:

· The climatic condition of each area especially rainfall distribution.

· The nature of the fertility of the soil, this explains why in the same area, maize do well on some plots of land and perform poorly on other plots.

· The topography of the area.

· Cultural practices of the people.

· The quantity and quality of the resources applied.

· The position of the area in relation to the market for the product.

All these factors affect farmer‟s decision on what to produce and the farming system to adopt. That is why we have variations in livestock and crop production across the country.

1.3.4 Land Cost

The cost of producing land is zero because it is the gift of nature.

Therefore, when we talk of cost of land, we are talking about the rental value i.e. the money paid for using a piece of land. Land cost varies from one location to the other. Generally, land cost more around urban areas and the cost reduces as we move away from the urban areas.

Land cost formed a small part of the fixed cost of farm budget in

Nigeria. Land cost in most cases, determines the combination of enterprises that will be practiced in the area. Where the rental value is high, farmer will like to make the maximum use of the land by producing combination of enterprises that will bring maximum output.

However, land tenure problem in Nigeria often prevent farmers from putting the best of their resources on the farm.

In general terms, efficient use of the land in areas where land is costly and in limited supply can be achieved by growing more profitable crops or rear animals with high gross margin. Farmers can also practice multiple cropping or even mixed farming and can reduce the length of fallow period by applying fertilizers to the land.

Methods of acquiring land

Acquiring land for farming purposes in some subsistence farming communities could be a simple procedure of requesting permission from the village or clan head. Some pieces of land are acquired through inheritance passed from one generation to another while others are either bought or rented. As agriculture becomes more commercial, a shift from communal to private ownership is gradually emerging. Land could also be acquired through gift. Additional land can be acquired through land reclamation of water-logged areas through appropriate drainage. Land is measured in hectares or acres

Self-Assessment Exercises:
1. Explain the methods of acquiring land.

2. What are the characteristics of Land?

1.4 Conclusion
In this unit, you have learnt about land resources. We discussed the meaning and characteristics of land. The unit further explained the management practices of land and the cost of land.
1.5 Summary
In this unit we have learnt that:
· Land is the gift of nature
· Land comprises of soil, climate, forests, fishing – ground and mineral ores.
· Land is fixed in supply.
· Land is not homogenous – it varies from place to place.
· Land is immobile – cannot be moved from place to place.
· Land has no production cost.
· The money we paid for the use of land is what we call rent.
· Rent form part of fixed cost of farm budget.
· It is possible to improve on the quality of land either through physical or cultural measures.

1.6 References/Further Reading/Web Sources
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1.7 Possible Answers To Self -Assessment Exercises Within The Content.

1. Explain the methods of acquiring land

Answer:

Acquiring land for farming purposes in some subsistence farming communities could be a simple procedure of requesting permission from the village or clan head. Some pieces of land are acquired through inheritance passed from one generation to another while others are either bought or rented. As agriculture becomes more commercial, a shift from communal to private ownership is gradually emerging. Land could also be acquired through gift. Additional land can be acquired through land reclamation of water-logged areas through appropriate drainage. Land is measured in hectares or acres.

2. What are the characteristics of Land?

1. Land is a gift of nature:

The supply of land comes from the nature. No human effort or sacrifice was necessary originally to produce land. That is why land has no cost of production for the society.

2. Limited in Supply: The quantity of land given is limited. Its supply can be neither increased nor decreased by any human effort. Hence economists remark that land has no supply price.

However, the money paid for the use of any parcel of land is what we call rent.

3. Land is Heterogeneous: Land like the other factors of production differs from one another in nature, fertility and productivity.

4. Land has multiple uses: Land is used for a variety of purposes like cultivation, animal rearing, building, and playground and so on. As it is demanded for multiple purposes, its demand exceeds the supply.

5. Land is Subject to the Operation of law of diminishing Returns: The constant and continuous cultivation of the land, with more application of labour and capital results in diminishing yield from the land.

6. Land is not destructible: Land can neither be destroyed nor created. Whenever, a farmer uses the land, he makes use of its productive capacity. By using the land, the farmer cannot destroy the land.

7. Land is Passive and immobile: Land is a passive factor of production and cannot produce anything of its own except if it is worked upon. Also land is fixed at a location and cannot be moved.

Unit 2 Capital

2.1 Introduction

Dear students I welcome you to Unit 2 in Module 3 of this Course AEA308 Principles of farm management. In unit 1, we defined land. We also discussed the characteristics of land and management practices of land. In this unit, emphasis will be on capital, characteristics of capital, sources and importance of capital.

2.2 Learning Outcome

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

· Define capital resources
· List the characteristics of capital
· Describe the types of capital available on the farm
· Identify the sources of capital available to farmers
· Explain the importance of capital in Farm Management.

2.3 Main Content

2.3.1 Definition of Capital.

Capital as a factor of production is commonly defined as those forms of wealth other than the land, from the use of which an income is expected. This means that all forms of wealth other than land which yields an income is capital. Capital can still be defined as the accumulated product of past labour destined for the production of further wealth. Capital is that wealth which yields an income or aids the production of income.

From the social point of view, capital is that wealth of individual and of communities, other than land, which is used to assist the production of further wealth.

In essence, capital represents resources that are not needed for their own sake but they are needed for the production of other goods. Unlike land, capital is produced as a result of human efforts. Examples of farm capital include: Farm buildings, farm machineries and equipment, fertilizers, farm land, seeds and planting materials, breeding stock, crops, simple farm tools and more importantly, cash. The reward of capital is interest.

2.3.2 Characteristics of Capital

1. **Capital is the result of Labour:** Some economists consider the capital as the storage of the past labour. The farm implements used for further production of wealth from bumper harvest, were the products of labour.
2. **Capital is the result of Savings:** Capital is equal to savings, which is equal to income minus consumption.
3. **Capital is Productive:** Capital in combination with other factors of production like land and labour, produces goods and services. Though Keynes an economist argue that capital is not productive rather efficient.
4. **Capital is prospective:** As the accumulation of capital yields an income, it is considered much prospective. This characteristic explains the supply side of capital.
5. **Capital is Temporary:** Capital is not is not permanent, rather it has to be reproduced and replenished from time to time.
6. **A mobile factor:** Capital is the most mobile factor of production.
7. **A passive factor:** Capital alone is unable to do anything. It produces with the aid of other factors of production.
8. **Capital is not a free Gift:** Capital is earned with hard work and sacrifice. It is not freely available like land to the individual and the society.
9. **Capital can be substitute for labour:** To some extent labour can be substituted by higher doses of capital. Mechanization of agriculture is one such example. However, all labour cannot be replaced by capital.

2.3.3 Types of Capital

There are many ways of classifying capital. Some of the classes of capital include the following:

1. Fixed Capital:

The demand for this group of capital remained constant irrespective of the level of production. Fixed capital refers to such farm assets that are acquired for the farm operation irrespective of the level of production. Such capital include – farm building, tractor and implements and other farm machineries.

2. Variable Capital: This form of capital is acquired based on the level of farm operation. The more the size of the farm, the more of such capital will be needed. Examples of variable capital include: cash, seeds and planting materials, fertilizers, e.t.c.

3. Long Duration Capital: Most of the fixed capital belongs to long duration capital. In addition, any capital that stretched beyond five years may be regarded as a long-term capital. Examples of such resources include: landed properties, farm buildings, perennial crops, e.t.c.

4. Medium Duration Capital: Any farm asset whose life span stretched between two to five years is normally classified as medium-term capital. In this group, we have heavy movable farm assets such as farm machineries, tractor, farm equipment and breeding stock.

5. Short Duration Capital: These are capital needed for a short period on the farm. This capital is completely consumed within a year of production cycle. Examples of short-term capital include: planting materials, fertilizers, chemicals, feed, annual crops, fuel,

6. Constant Flow Capital: This type of capital generates cash for the farm business on daily basis. Examples of such capital include dairy cattle for the production of milk, layers for the production of eggs and vegetables.

7. Monetary Capital: This refers to the raw cash used for the purchase of necessary materials and for the day to day running of the farm business. Because of this, money capital is at times refers to as circulating or floating capital.

2.3.4 Sources of Capital

The various sources of acquiring capital for farm operations include the following:

1. Personal Savings: From the income generated, farmers can reinvest to generate more income. **2. Friends and Relatives:** Friends and relatives can assist farmers, especially new entrants to acquire farm assets. This source of capital is however not very reliable.

3. Money Lenders: Money lenders constitute one of the major sources of capital to farmers in Nigeria. Even though money lender is a reliable source of capital, the interests charged are usually too high. The high interest rate is because of high rate of default.

4. Cooperative Societies: Cooperative societies are now becoming a very popular source of acquiring capital in Nigeria. The interest charged are usually small but the major problem of cooperative is the small amount of loanable compare to the number of people that wants to borrow.

5. Commercial Banks: Commercial Banks are another major source of capital to farmers in Nigeria. With the various programmes that the Government put in place to guarantee the farmers, banks are no longer afraid to lend money to local farmers.

6. Other Banks: Apart from Commercial Banks, there are other banks that grant credit to farmers to set up farm business. Such banks include: Agricultural and Rural Development Bank, Community Banks and Development Merchant Banks. Most of them are established partly to assist farmers acquire farm capital

7. Government Institutions: Some states established agricultural credit corporations to assist farmers acquire farm capital for the operation of their farms. National Directorate of
Employment is another important Government institution put in place to assist young men going into farming to acquire farm capital. There are other Poverty Alleviation Programmes by different state governments that are designed to assist farmers in acquiring farm capital.

2.3.5 Functions of Capital

1. Capital is an essential factor of production and reduces drudgery.
2. Capital goods like machines and tools enable the labourer to produce more goods and services.
3. The production between the initial and the final stage is made continuous by capital.
4. Production with capital for a reason is called "a roundabout process".
5. It helps to raise the dignity to labour and even unhygienic work can be performed easily.
6. It is a useful tool for capital formation.
7. It is a source to promote technical development of the country.

Self-Assessment Exercises:
1. Explain the methods of acquiring capital.

2. Outline the functions of capital.

2.4 Conclusion

In this unit, we defined capital and list the characteristics of farm capital. We further explained the various types of farm capital available to farmers. We also discussed the sources of acquiring farm capital and in the concluding part of the unit; we explained the functions of capital in agricultural production.

2.5 Summary

This unit is devoted to farm capital and in the unit we learnt that:
· Capital is the produced means of production.
· The reward of capital is interest i.e. what is paid for the use of capital is interest. · Capital is the result of Labour, it is the result of labour, capital is productive, mobile and passive factor.
· Capital can be classified into fixed, variable, long-term, medium term, short term, constant flow and monetary capital.
· The sources of acquiring farm capital include – personal saving, friends and families, money lender, cooperative societies, banks, Government institutions among others.

· Capital is an essential factor of production and reduces drudgery.

2.6 References/Further Reading/Web Sources

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2.7 Possible Answer To Self-Assessment Exercise(S) Within The Content

1. Explain the methods of acquiring capital

Answer:

Many farmers seem to think, that the only way they can get capital is by borrowing. They forget that they could save the necessary money or even make capital themselves. It should be remembered that capital which is borrowed must have been saved by someone else. Capital can be acquired by savings, borrowing from formal or informal sources. Formal sources include banks, Government organization, cooperative societies. Informal sources include friends, neighbours, relations, husbands and wives etc. The advantages of obtaining capital from the formal sources include among others: They are reliable and dependable and large amount of money can be obtained as loan, Nonetheless, the application and granting of loan procedure is very cumbersome. In addition, the interest rate is relatively high. The advantages of obtaining capital/credit from the informal sources is that little or no interest rate is charged and also there is little or no bureaucratic procedure. Nonetheless, the amount of loan that can be obtained from this source is very small. Also, repayment rate is low due to high rate of default since no collateral is required. Granting of loan is more or less on personal interaction and connection and "man-know-man basis".

2. The functions of capital:

1. Capital is an essential factor of production and reduces drudgery.

2. Capital goods like machines and tools enable the labourer to produce more goods and services.
3. The production between the initial and the final stage is made continuous by capital.
4. Production with capital for a reason is called “a roundabout process”.
5. It helps to raise the dignity to labour and even unhygienic work can be performed easily.
6. It is a useful tool for capital formation.
7. It is a source to promote technical development of the country.

Unit 3 Labour

3.1 Introduction

Dear students I welcome you to Unit 3 in Module 3 of this Course AEA308 Principles of farm management. You remember that this module is devoted to discussing the factors of production. The last unit of the module discussed capital as a factor of production.
In continuation of our discussion on the factors of production, this unit is devoted for discussing labour resources.
Under labour resources, we shall look at the meaning of labour and sources of labour supply. Other areas include: Efficiency of labour, measurement of efficiency of labour and division of labour.

3.2 Learning Outcome

By the end of the unit, you should be able to:
· Define labour resources
· List the sources of labour supply
· List the factors that affect the efficiency of labour
· Explain how to measure the efficiency of labour
· Describe division of labour
· List the disadvantages of division of labour.

3.3 Main Content

3.3.1 Definition of Labour

Labour refers to all human efforts of the body or mind, undertaken in the expectation of reword.
This means any work whether mental or manual, undertaken for monetary reward is labour. Labour may also be defined as all human effort which

may be physical or mental, skilled or unskilled used in the production process. Labour as a factor of production involves human being. The rewards for the use of labour are wages and salaries. Labour in combination with other factors of production is utilized to produce product. Labour is almost the most difficult among the factors of production to deal with because it involves man. The person drawing more than half of his income by working in agriculture is termed as agricultural labourer. In agriculture, skilled workers include farm manager, Extension Officer, horticulturist, agronomist, animal scientist, etc. The unskilled workers perform general services such as farm attendants, gardeners and messengers.
Farm manager is interested in both the quantity and quality of labour.
The quantity of labour refers to the total supply of labour while the quality of labour determines its efficiency.

3.3.2 Characteristics of Labour

1. **Labour means Human Exertion:** Labour means only human exertion and not the exertion of the cattle or machine. Labour always involves the mental or physical pain and sacrifice. For example, when a man works and is busy for a few hours, he becomes tired and so he needs rest.

2. **A Man's labour is part of himself:** This means the labour cannot be separated from the labourer. When the labourer sells his labour he has to deliver it in person and he cannot sell his labour like land or capital.

3. **Labour Power and Labourer Co-exist:** The labour power exists as long as the labourer exists. It becomes invalid or disappears when the labourer retires or expires.

4. **Labour is Perishable:** The labour power withheldonce is lost forever and cannot be stored. It cannot be regained. A day without work is gone irrevocably

5. **Labour has low bargaining Power:** Usually labourers have no reserve and are compelled to accept low wages. But the development of trade unions has considerably improved the bargaining power of the labour in recent times.

6. **Labour has Intelligence and Judgment:** Labour is something more than mere toil and exertion, for labourer being human beings, have intelligence and judgment and further the toil and exertion can be more easily undertaken by machines rather than by men. Thus the distinguishing mark of labour as a factor of production is the exercise of intelligence and judgment.

7. A labourer is both a means of production and an end of it.

8. The efficiency of labour can be increased through training, education and experience.

9. A labourer can make rational decisions regarding his job.

10. No two individuals have equal productive ability. It is therefore, generally accepted that labour varies in quality from one person to the other.

11. Labour can be classified into productive and non-productive. Productive labour refers to any human effort that could change the forms of raw materials thereby creating utilities out of them.

3.3.3 Supply of Labour

The supply labour will be discussed under the types of labour available and sources of labour supply.

3.3.4 Types of Labour

1. Skilled, Semi-Skilled and Unskilled Labour: The work which is performed by human beings requiring some sort of special training or possesses special knowledge is called skilled labour.

Examples are agricultural officers, engineers, lawyers, doctors, accountants, etc.

Semi-skilled labour involves the combination of both physical and mental efforts in carrying out productive activities. It includes workers with little education and training. They perform such work as clerical job, typist and such other middle level manpower.

Unskilled labour involves those workers with no education who use physical energy in carrying out their production activities. The categories of workers that fall under unskilled labour include messengers, cleaners, security guard and others that do not require mental efforts to perform.

2. Productive and Unproductive Labour: Productive labour implies all those human efforts which make an addition to the utility by creating material and non-material goods. Unproductive labour is that which makes no addition to the utility. The services of thieves that comes to the farm to steal are unproductive.

3. Manual and Mental Labour: The work which involves the physical strength is regarded as the manual or physical labour. For example, the work of harvesting and weeding is called the manual labour. The work which is based on the mental strength of human beings is called the mental labour. The work of a farm manager, supervisor and accountant etc. is an example of mental labour.

4. Family and Hired Labour: In agriculture, family labour constitutes a significant part of the total labour force. The hired labour may be permanent hired labour or casual labour.

3.3.5 Sources of Labour

In almost all Nigerian small farmer communities, one can distinguish between three sources of labour for farm operations:

· Family labour
· Hired or paid labour

· Exchange or communal labour

In the peasant societies labour is provided by farmer and his family and this is one of the reasons for having many wives so as to help on the farm. The size and type of farm depend on the number of people in the family. Occasionally, there is communal labour before the advent of hired labour. Usually, wages is determined by the type of farm operation embarked on.

The overall labour supply is affected by the following factors: a. The total population in the area

b. The proportion of the population that is available for employment.
c. The number of hours worked by each person per year.
d. The level of economic activities of the area.

3.4 Efficiency of Labour

3.4.1 Definition of efficiency of Labour

Generally, labour has two aspects, quantitative aspect as well as qualitative.

The quantitative aspect of labour is concerned with the efficiency of labour. The efficiency of labour refers to the power of a worker to work and produce goods and services one can produce during a given period of time. Efficiency of labour is a relative term which leads to a comparative study of the work done by different persons.

Labour efficiency is the ability to achieve a greater output in a shorter period of time and without any reduction in the quality of the work. In other words, efficiency of labour refers to the ability to increase productivity per man employed.

3.4.2 Factors Affecting Labour Efficiency

The efficiency of labour force depends on a number of factors which include:

1. **Climate:** This is an important factor in agricultural production. It influences the willingness to work. Extreme temperature or high humidity is not conducive to work. Rainfall is another important climatic factor that can influence efficiency of labour as most farmers will not be willing to work under heavy rainfall.
2. **Health of the Worker:** The efficiency of the worker is closely related to his state of health which in turn depends on his being adequately fed, clothed and housed.
3. **Peace of Mind***:* Anxiety is detrimental to efficiency. A social security scheme relieves people from worry about the future by providing for them in times of sickness, unemployment, and old age. Whatever situation that can cause anxiety, fear and unrest in the mind of farmer will affect his general performance on the farm.

3. **Working Conditions:** The general condition under which people work can influence the efficiency of labour. For workers to be efficient in the performance of their duties if require motivation and encouragement.

It also requires regular payment of their wages and salaries as at when due. Their annual increment and promotions must also be given to them at the appropriate time. Overtime and bonuses can be paid to motivate them to do more. Other steps that can be taken to improve efficiency include granting of vehicle and housing loan.

4. Education and Training: This factor has three aspects – general education, technical education and training-on-the-job. A high standard of general education is essential for developing intelligence and providing a foundation upon which more specialized vocational training can be based. Technical education is available to most people only in their own time, generally by attendance at evening classes. Vocational education consists chiefly of subjects related to the profession or trade of student. The third type of training is known as training on the job and each firm must undertake this for its own employees.

5. Efficiency of other Factors: The productivity of labour will be increased if the quality of the other factors is high. The more fertile the land, the greater will be the output per man, other things being equal.

6. Nature of Farm Layout: How crops and/or livestock are combined influences labour utilization from day to day and from season to season. Fragmented fields and poor layout can result in an inefficient use of labour.

7. Management and Supervision of Labour: The way labour is managed and supervised makes a given supply of labour more effective on one farm than the other. Others are the ways workload is planned, the type of incentive given or the wage rate paid.

3.4.3 Management and Supervision Of Labour

There are many methods of measuring labour efficiency. Realistic assessment of labour use must take care of family labour, valued at the current wage rate. If an adult man works on the farm for
a whole day, it is valued as one man-day. If it is an adult woman, it is valued as two third manday and children are valued as one-third man-day.

The following are the methods of measuring labour and machine efficiency:

1. **By Observation:**

By observation, you can compare known optimum efficiency with the performance on the farm. Balance of seasonal labour requirement on the farm is an aspects which can pinpoint local weakness in the use of labour.

2. **Calculating Labour Cost per Hectare:** This is not a reliable method but quick to measure efficiency. Increases in labour input are economically justified so long as the result in addition to output exceeds the value to cost of extra labour. This depends on the intensity of farming – very intensive farm carries higher labour cost.

High output per man may be achieved at the expense of other farm resources. That is why this method is not very reliable.

3. **Labour Efficiency Index:**

This method compares the calculated man day‟s requirement of the farming system with the actual man-day used.

The step used in the calculation is as follow:

· **Step I:** Estimate the normal labour requirement in man days using a standard table of man-day requirement for each crop and livestock

· **Step II:** Find 15 – 20 percent of this total man-day requirement. That is devoted to works of general nature.

· **Step III:** Subtract this 15 percent from the total man-day requirement to obtain the annual labour requirement in man-day.

· **Step IV:** The annual labour obtained for the farm now valued based on the current wage rate in the area and at the rate of working 8 hours per day.

· **Step V:** The resulting figure is then compared with annual labour cost including an allowance for paid family labour.

Mathematically:

$$\text{Labour Efficiency Index (LEI)} - \frac{\text{Estimated Manday}}{\text{Actual Manday used}} \times \frac{100}{1}$$

A result of over 100 indicates a better than average Labour Efficiency Index.

3.4.4 Division of Labour

The first stage in the division of labour occurred when one began to specialize in particular crafts instead of doing everything for them. The term is however, more particularly applied to specialization of processes where the production of a commodity is divided into a number of separate processes each of which is performed by a different man. Traditionally, there is division of labour between domestic and farm activities. Subsistence crops which require little work are looked after by women while the cash crops which require more work are usually looked after by men.

Some of the advantages of division of labour are as follows:

Men acquire greater skills when they specialize in single operation.

It reduces the waste of time that occurs when men have to change from one process to another.

It also paves way for the introduction of machinery.

Disadvantages of division of labour are:

The work becomes more monotonous.

A decline in craftsmanship occurs and specialists find it more difficult to obtain work if they become unemployed.

The extent to which division of labour can be carried out is limited by the extent of the market for the commodity.

Self-Assessment Exercise

1. Explain what you understand by division of labour.

2. What are the methods of measuring labour and machine efficiency:

3.5 Conclusion

You have noted that labour is human effort and the rewards paid for the use of labour are wages and salaries. We looked at the characteristics of labour and supply of labour. We further discussed the factors affecting the efficiency of labour and measurement of labour efficiency.

3.6 Summary

In this unit, you have studied labour resources as a factor of production. In this regard you have learnt that:

· Labour could be physical or mental, skilled or unskilled and productive or non-productive.
· Labour is perishable and it varies from one person to another and with time.
· Labour can be grouped into skilled, semi-skilled and unskilled.
· In traditional agriculture, there are three sources of labour supply – family labour, hired or paid labour and exchange or communal labour.
· Labour efficiency means increased productivity per man employed.
· Climate, health of worker, peace of mind, education and training, working conditions, efficiency of other factors of production e.t.c. all influence the efficiency of labour.
· We can measure labour efficiency through observation, calculation of labour cost per hectare and calculation of the labour efficiency index.
· Man acquires greater skills and reduces time wastage in farm operations through division of labour.
· Work becomes monotonous as a result of division of labour. There is also decline in craftsmanship.

3.7 References/Further Reading/Web Sources

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3.8 Possible Answer To Self-Assessment Exercise(S) Within The Content

1. Explain what you understand by division of labour.

Answer:

1. Division of Labour

The first stage in the division of labour occurred when one began to specialize in particular crafts instead of doing everything for them. The term is however, more particularly applied to specialization of processes where the production of a commodity is divided into a number of separate processes each of which is performed by a different man. Traditionally, there is division of labour between domestic and farm activities. Subsistence crops which require little work are looked after by women while the cash crops which require more work are usually looked after by men.

2. **What are the methods of measuring labour and machine efficiency:**

a.By Observation:

By observation, you can compare known optimum efficiency with the performance on the farm. Balance of seasonal labour requirement on the farm is an aspects which can pinpoint local weakness in the use of labour.

b.Calculating Labour Cost per Hectare:

This is not a reliable method but quick to measure efficiency. Increases in labour input are economically justified so long as the result in addition to output exceeds the value to cost of extra labour. This depends on the intensity of farming – very intensive farm carries higher labour cost.

High output per man may be achieved at the expense of other farm resources. That is why this method is not very reliable.

Unit 4 Entrepreneurship

4.1 Introduction

My dear students I welcome you to Unit 4 in Module 3 of this Course AEA308 Principles of farm management.

In Units 1, 2 and 3 of this module, we have discussed the management of farm inputs used in the production process. The farm input discussed include – land, capital and labour. We discussed the meaning of these factors of production and their characteristic features. We further discussed their importance in Farm Management. The last unit of this module is devoted for entrepreneur.

4.2 Learning Outcome

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

· Define entrepreneur
· Explain why entrepreneur is separated from labour
· Describe the organizational structure of a typical farm business.

4.3 Main Content

4.3.1 Definition of Entrepreneur

Entrepreneur or Enterprise or Organization describes the function of taking decision about what to produce and who combines the other factors of production to produce what has been decided on. He combines and organises land, labour and capital in such a way as to obtain maximum production of goods and services at minimum costs.

The entrepreneur is normally the person who risks his capital in establishing a business whose profitability cannot be determined at that time. The reward for entrepreneur is profit or loss.

4.3.2 Why Entrepreneur is separated from Labour

Entrepreneur which is the fourth factor of production involve human efforts similar to labour and yet it is separated from labour as a factor of production. The reason for separating entrepreneur from labour is based on the crucial functions which entrepreneur performed which labour does not perform.

These functions are as follows:

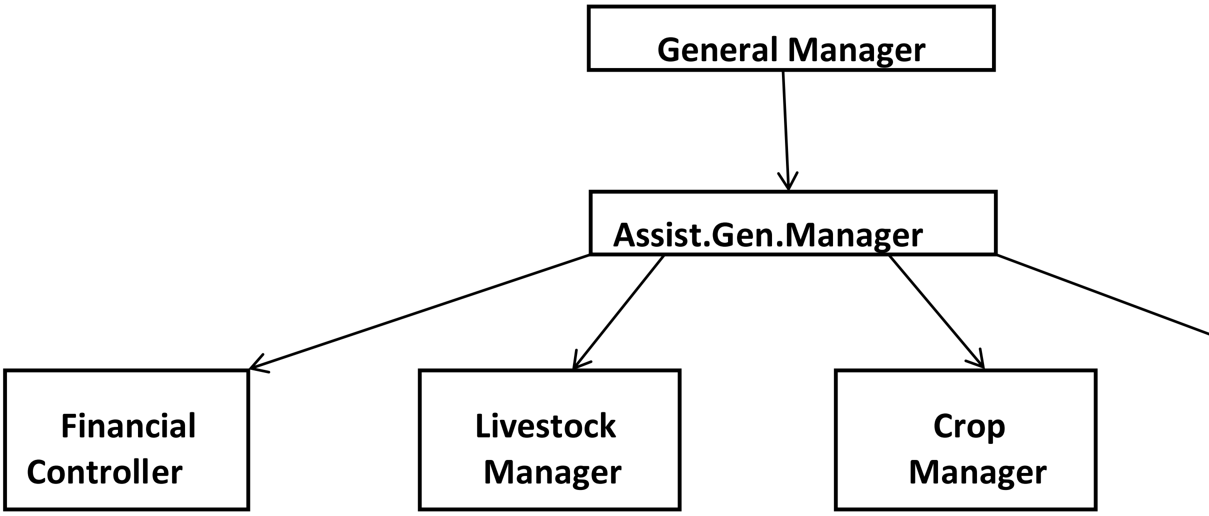
1. **Provision of Capital:** This is one of the most important functions performed by entrepreneur which labour does not perform. He provides the capital for the formation of the business.
He also provides capital for carrying out production activities of the business.
It is from this capital provided that other factors of production like labour can function.
2. **Risks Bearing:** Entrepreneur bears all the risks that occur in business. As the provider of capital if the business fails, he bears the loss all alone. That is why his reward is either profit or loss. It is pertinent to mention here that labourers will collect their wages whether the business succeeds or not, he does not share in the risk of the business.

3. **He takes decisions:** Decision taking is another important function of entrepreneur. There are many decisions confronting business organization. In farm business, entrepreneurs are confronted with such decisions as what to produce, how much to produce and how to produce. The success or failure of the business depends greatly on the good or bad decisions taken by the entrepreneur.
4. **Co-ordination of Other Factors**: The entrepreneur combines and co-ordinates other factors of production in order to achieve meaningful production. He determines the quality and quantity of these other factors of production that will be enough for productive purposes.
5. **Efficient Management**: The entrepreneur also plays the role of maintaining efficient management in production lines. He directs where workers should work and delegate authority to his assistant for the efficient and effective management of their limited resources.
6. **Miscellaneous Functions**: These functions include determination of the price of goods produced, ensuring good working condition for the workers, determining the scale of production, whom to employ and retrench or retire, etc.

4.3.3 Farm Organisational Chart

Agricultural businesses are made up of people working together toward a common purpose. As soon as the agribusiness involves more than one person, a variety of organizational, personnel, leadership and motivational issues inevitably arises. The larger the organization, the more complex and critical the issues become.

A Typical Farm Organisational Structure



The typical farm organisational structure above provides a cordial relationship between Farm
Management and farm workers. The highest authority in a farm organisation is the General Manager who may be the owner of the business or employed to perform the duty. Next to him is the Assistant General Manager. After the Assistant General Manager, the running of the business is divided into various units. The Finance Department is headed by the financial controller and administrative department is headed by Administrative Manager. Depending on the complexity of the business, the core units can be divided into crop and livestock each headed by a manager. All the workers under each unit are answerable to their sectional head who will in turn take instructions from above.

No organisational structure is better than the people of whom it is composed. Their understanding of the structure and their willingness to within it are essential to its effectiveness.

Even when people are trying to make it work, problems arise. People have emotions and misunderstandings especially during seasonal peaks of farm production and emotionally tired. At this point and at all stages of farm production only an honest and effective communication can resolve any problem that may arise between the farm workers.

Self-Assessment Exercises:

1. Who is an entrepreneur?

2. Why is entrepreneur separated from labour as a factor of production?

4.4 Conclusion

In unit four, we discussed the entrepreneur as a factor of production. In this unit, we defined entrepreneur and justified why entrepreneur is separated from labour as a factor of production.

We finally described the organisational structure of a typical farm business.

4.5 Summary

In this unit, we have learnt that:

· Entrepreneur combines and organises other factors of production to produce maximum output with minimum cost.

· Entrepreneur is also known as enterprise or organization.

· The reward of entrepreneur is either profit or loss.

· Both entrepreneur and labour involve human efforts but entrepreneur is different from labour because the two perform different functions.

· Entrepreneur provides the capital used in forming the business as well as the capital needed for the day to day running of the business.

· The entrepreneur bears the risks of the business alone and takes decisions all alone. Therefore, all the profit or loss also belongs to him alone.

4.6 References/Further Reading/Web Sources

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4.7 Possible Answer To Self-Assessment Exercise(S) Within The Content

Answers:

1. Entrepreneur or Enterprise or Organization describes the function of taking decision about what to produce and who combines the other factors of production to produce what has been decided on. He combines and organises land, labour and capital in such a way as to obtain maximum production of goods and services at minimum costs.
The entrepreneur is normally the person who risks his capital in establishing a business whose profitability cannot be determined at that time. The reward for entrepreneur is profit or loss.

2. Why Entrepreneur is separated from Labour:
Entrepreneur which is the fourth factor of production involve human efforts similar to labour and yet it is separated from labour as a factor of production. The reason for separating entrepreneur from labour is based on the crucial functions which entrepreneur performed which labour does not perform.
These functions are as follows:

i. Provision of Capital: This is one of the most important functions performed by entrepreneur which labour does not perform. He provides the capital for the formation of the business.
He also provides capital for carrying out production activities of the business.
It is from this capital provided that other factors of production like labour can function.
ii. Risks Bearing: Entrepreneur bears all the risks that occur in business. As the provider of capital if the business fails, he bears the loss all alone. That is why his reward is either profit or loss. It is pertinent to mention here that labourers will collect their wages whether the business succeeds or not, he does not share in the risk of the business.

iii. He takes decisions: Decision taking is another important function of entrepreneur. There are many decisions confronting business organization. In farm business, entrepreneurs are confronted with such decisions as what to produce, how much to produce and how to produce. The success or failure of the business depends greatly on the good or bad decisions taken by the entrepreneur.

iv. Co-ordination of Other Factors: The entrepreneur combines and co-ordinates other factors of production in order to achieve meaningful production. He determines the quality and quantity of these other factors of production that will be enough for productive purposes.

v. Efficient Management: The entrepreneur also plays the role of maintaining efficient management in production lines. He directs where workers should work and delegate authority to his assistant for the efficient and effective management of their limited resources.

vi. Miscellaneous Functions: These functions include determination of the price of goods produced, ensuring good working condition for the workers, determining the scale of production, whom to employ and retrench or retire,

Module 4 Forms Of Business Ownership

Unit 1 Sole Or Single Proprietorship

1.1 Introduction

My dear students I welcome you to Unit 1 of Module 4 of this Course AEA308 Principles of farm management.

In module 3, we discussed the factors used in the production of farm output. In Unit 1, we defined land stressing its characteristics and management practices. In unit 2, we defined capital, characteristics of capital, types and sources of capital. We discussed labour in Unit 3 stressing its characteristics, supply and efficiency of labour. In that unit, we further discussed measurement of labour efficiency and division of labour. Finally, in Unit 4, we discussed entrepreneur and differentiated entrepreneur from labour as a factor of production. This module is devoted for discussing the forms of farm business ownership. The module is divided into four units – sole proprietorship, partnership, cooperative and corporate business or enterprise.

1.2. Learning Outcome

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

· explain the meaning of sole proprietorship
· list the characteristics of sole proprietorship
· list the advantages of sole proprietorship
· list the disadvantages of sole proprietorship

1.3 Main Content

1.3.1 Meaning of Single Proprietorship

The simplest form of business in farm organization, is the one-man business or sole proprietorship. It is a form of business organisation where one person combines productive
factors for the immediate purpose of making revenue or profit (Ajayi: 1981).
It exists where the whole business is owned and controlled by one person. He bears all the risks alone and this form of business has unlimited liability. He however, enjoys all the profits alone. This type of business has no legal existence i.e. it is not a legal entity.

1.3.2 Characteristics of a Single Proprietorship

The main features or characteristics of single or sole proprietorship include the following:

1. **Forms of Ownership:** It is owned and run by one person, though he may have employees.
2. **Type of Liability:** He has unlimited liability. Therefore, the failure of the business could lead to the sale of his personal assets.
3. **Source of Capital:** He provides the capital required for starting and running the business either from personal saving or loan from other sources.
4 **Motive of its Formation:** The motive of forming the business is to make profit. If the business succeeds, he makes profit, but if the business fails, he sustains a loss.
5 **The Legal Status:** The business is not a separate legal personality. The law does not distinguish between the business and the owner.
6 ***M*ethod of Withdrawing Capital:** The business is controlled and managed by the sole proprietor himself. Therefore, the owner does not consult anybody before withdrawing capital.

7.Nature of the Business: The one – man business is the oldest, simplest and most common type of business organisation. Many big business concerns which exist today started as sole – proprietorship.

1.3.3 Advantages of Sole – Proprietorship

1. **Establishment:** It comes into existence with great ease. This is because it requires small capital and it does not require all the formalities and legal processes undergone by other forms of business.

2. Capital Requirement: Sole proprietorship requires small capital to operate. Because of this advantage, it is the commonest and most popular form of business ownership in Nigeria.

3. Decision making: Decision taking is quick. This is because the sole-proprietor does not need to consult anybody before taking decision.

4. Business Management: This form of business is easy to manage because of its small size and small number of workers involved.

5. Business Environment: The sole proprietorship is suitable where there is a need for special products and a small market for goods and services. Where special products are required, the one-man business is very suitable since production is usually on a small scale. Large business organisations produce standardized goods and are therefore, hardly suitable for providing special products.

6. Share of Profit: Since the business owner contributes all the capital used in establishing and running the business alone, all the profits also belong to him alone.

7. Existence of Privacy in the Business: The sole proprietor can keep his business affair secret. No law compels the owner of the business to submit his audited balance sheet to the registrar of companies.

8. Relationship between the Owner and the Employees: As a result of the small nature of sole-proprietorship, the employees are personally known to the proprietor. This makes supervision easy and ensures effectiveness of business operations.

9. Multiple Occupations: It is possible for the sole-proprietor to operate more than one occupation at a time. The owner can combine two or more types of occupation as a result of the flexibility of his business.

10. Withdraw of Asset: In case the owner is no longer interested in the business, he can easily withdraw his assets without consulting anybody. As it is easy to form the business, it is equally easy to close the business.

1.3.4 Disadvantages of Sole-Proprietorship

1. Limited Capital: There is limited capital to finance the business. This is as a result of the fact that the capital used in running the business comes from one man. As a result, lack of enough capital limits the rapid expansion of the business.

2. **Limited Ability:** As a result of the fact that the business revolves around one man, its progress depends on the ability of the proprietor alone.

3. **Unlimited Liability:** He bears the entire risk of the business alone. If the business fails, he bears the entire loss and his personal belongings may have to be sold to pay his creditors. His liability is not limited to the amount of capital he has invested in the business.

4. **The Business is not a Legal Entity:** The owner is not distinct from the business. This means that if the business is taken to court it is the owner that is also taken. The business cannot sue or be sued in its own right.

5. **Lack of Continuity:** The business has uncertainty of continuity. The exit of the owner may end the business. If the sole proprietor dies, the business may die with him either because he has no reliable somebody to continue the business or his children/relations lack interest in the business.

6. **Low Competitive Ability:** This is because of limited capital and limited ability of the owner. The owner of the business does everything alone. Therefore, his ability to compete effectively with other similar business is highly limited to whatever the owner can offer.

7. **Inadequate Leisure Time:** There is no period of rest or break for the business owner. The proprietor has no leave and no retirement age. He continues to work day and night for success of the business.

Self-assessment exercises:

1. Discuss the characteristics of a Single Proprietorship.

2. What are the advantages of Sole – Proprietorship?

1.4 Conclusion

In Unit 1 of this module, we have discussed single or sole proprietorship as a form of business ownership. The unit is divided into four sections. The first section explains the meaning of one-man business; the second section discussed the characteristics features of sole or single proprietorship. Sections three and four highlighted the advantages and disadvantages of sole proprietorship respectively.

1.5 Summary

In this unit we have learnt that:

a. In single proprietorship, the business is owned and controlled by one person.

b. It is the most common and simplest form of business ownership among the rural people in Nigeria.

c. The highlights of the characteristic features of single proprietorship include:

· Form of business ownership,
· Type of liability,
· Source of capital,
· Motive of its formation,
· The legal status,
· Method of withdrawing capital and nature of the business

d. The areas touched under the advantages of single proprietorship include:

· Ease of establishment,
· Small capital requirement,
· Quick decision taking
· Easy management of the business can be operated under special demand,
· Shares profit alone and
Existence of privacy in the business, etc.

e. The major disadvantages highlighted

· Limited capital,
· Limited ability,
· Unlimited liability,
· The business is not a legal entity,
· There is lack of continuity in case of death of the owner and · Low competitive ability.

1.6 References/Further Reading/Web Sources

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1.7 Possible Answers to Self-Assessment Exercises

Answers:

1.
The main features or characteristics of single or sole proprietorship include the following:

1. Forms of Ownership: It is owned and run by one person, though he may have employees.
2. Type of Liability: He has unlimited liability. Therefore, the failure of the business could lead to the sale of his personal assets.
3. Source of Capital: He provides the capital required for starting and running the business either from personal saving or loan from other sources.
4 Motive of its Formation: The motive of forming the business is to make profit. If the business succeeds, he makes profit, but if the business fails, he sustains a loss.
5 The Legal Status: The business is not a separate legal personality. The law does not distinguish between the business and the owner.
6 Method of Withdrawing Capital: The business is controlled and managed by the sole proprietor himself. Therefore, the owner does not consult anybody before withdrawing capital.
7.Nature of the Business: The one – man business is the oldest, simplest and most common type of business organisation. Many big business concerns which exist today started as sole – proprietorship.

2. The advantages of Sole – Proprietorship are:

1. Establishment: It comes into existence with great ease. This is because it requires small capital and it does not require all the formalities and legal processes undergone by other forms of business.

2. Capital Requirement: Sole proprietorship requires small capital to operate. Because of this advantage, it is the commonest and most popular form of business ownership in Nigeria.

3. Decision making: Decision taking is quick. This is because the sole-proprietor does not need to consult anybody before taking decision.

4. Business Management: This form of business is easy to manage because of its small size and small number of workers involved.

5. Business Environment: The sole proprietorship is suitable where there is a need for special products and a small market for goods and

services. Where special products are required, the one-man business is very suitable since production is usually on a small scale. Large business organisations produce standardized goods and are therefore, hardly suitable for providing special products.

6. Share of Profit: Since the business owner contributes all the capital used in establishing and running the business alone, all the profits also belong to him alone.

7. Existence of Privacy in the Business: The sole proprietor can keep his business affair secret. No law compels the owner of the business to submit his audited balance sheet to the registrar of companies.

8. Relationship between the Owner and the Employees: As a result of the small nature of sole-proprietorship, the employees are personally known to the proprietor. This makes supervision easy and ensures effectiveness of business operations.

9. Multiple Occupations: It is possible for the sole-proprietor to operate more than one occupation at a time. The owner can combine two or more types of occupation as a result of the flexibility of his business.

10. Withdraw of Asset: In case the owner is no longer interested in the business, he can easily withdraw his assets without consulting anybody. As it is easy to form the business, it is equally easy to close the business.

Unit 2 Partnership

2.1 Introduction

My dear students I welcome you to Unit 2 of Module 4 of this Course AEA308 Principles of farm management.

In Unit 1 of this module, we discussed the most popular form of business ownership among the farmers – sole proprietorship. Issues raised in the unit include: meaning of sole proprietorship, characteristics of sole proprietorship, advantages and disadvantages of sole proprietorship. This unit is devoted to discussing partnership form of business ownership. The area covered include:

meaning of partnership, types of partnership, characteristics of partnership, advantages and disadvantages of partnership

2.2. Learning Outcome

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

· explain the meaning of partnership
· describe the various types of partnership form of business ownership
· list the characteristics of partnership
· list the advantages of partnership
· list the disadvantages of partnership business organisation.

2.3. Main Content

2.1.1 **Meaning of Partnership**

Partnership is a relationship which exists between two or more persons, who by an agreement decided to run a business together and share the risks and profits of the business. Generally, the number of partners may vary from a minimum of two to a maximum of twenty.

People wishing to form themselves into a partnership should draw up a Deed of Agreement or Article of Partnership which sets out in written form, the terms and conditions of the partnership. The Deed is not a legal necessity but it has the advantage of containing a written agreement should dispute over the terms of the partnership arise in future. The partnership Deed usually contains the following:

· Names of the partners
· Name and nature of the business formed.
· Amount of capital contributed and the rate of interest to be paid on the capital invested in the business.
· Distribution of the partnership
· Duration of the partnership
· Amounts that can be withdrawn by the partners from the partnership for their private use since they do not receive salaries.
· The procedure of liquidation or what happens after the death of a partner.

2.3.2 Types of Partnership

There are two major types of partners:
· **Ordinary or Active Partners:** In this type of partnership, all members contribute equal capital and take active part in the organisation and management of the business. All the partners have equal powers, unlimited liabilities and profits are shared equally.

· **Limited or Sleeping Partners:** A sleeping partner on the other hand is someone who contribute capital but takes no active part in the organisation and management of the business.
As the name implies, a limited partner has a limited liability.
This partner does not receive any salary as he does not take part in the organisation and management of the business. He receives a fixed rate of interest on his capital.

2.3.3 Characteristics of Partnership

The main features or characteristics of partnership include the followings:

· **The Legal Status:** The business is not a separate legal entity and cannot therefore sue or be sued in its own name.

· **Types of Liability:** Partners have unlimited liability.

· **Source of Capital:** The partners contribute capital/skill according to the agreement reached. In return, each of them receives a proportion of the profits as agreed.

· **Motive of its Formation:** The motive of forming partnership is to make profit.
· **The Legal Status:** The business is not a separate legal entity and cannot therefore, sue or be sued in its own name.

· **Nature of the Business:** The business has no board of directors.
The control and management of the business is in the hands of the active partners.
· **Method of Withdrawing Capital:** Withdrawal of capital must be approved by other partners as laid down in their partnership deed.
· **Mode of Operation:** The partners usually take the major decisions together. They also bear the risks of the enterprise together.

2.3.4 Advantages of Partnership

a. **Capital Supply:** This form of business ownership offered better resources for starting and running a business than the sole proprietorship. This is because partnership required two to twenty people pooling their resources together. In addition, it will be easier for a group of people to borrow money in the bank to finance the business than individuals. This is because the group will be able to offer better collateral security than individuals.

b. **Decision Making:** There is the likelihood that better decisions would be taken. Since decisions are jointly taken, each partner will contribute his own ideas. The better ideas are taken since two heads are better than one.

c. **Sharing of Risks and Liabilities:** Business risks are shared among all the partners. Each partner is jointly liable with other members of the business for all the debts of the partnership. This reduces the liability of each partner in the event of business failure.

d. **Prospect of Business Continuity:** Unlike sole proprietorship, the death of one partner may not lead to a total dissolution of the business since the other partners can continue the business. Furthermore, a partner may take rest due to illness without adversely affecting the business.

e. **Existence of Privacy in the Business:** Like the single proprietorship, the partnership can keep its business affairs private since it is not required to make its accounts available for public inspection.

f. **The Relationship between the Partners and the Customers:**
There is still personal contact with both the customers and the employees of the business. This is because of the small size of the business when compared with corporate business

g. **Multiple Occupations:** Like the single proprietorship, partnership is allowed to set up more than one small business. In addition, each of the partners could still run another small business on his own.

h. **Specialization and Division of Labour:** As a result of different skills and talents possessed by partners, application of division of labour is possible. There could be specialisation among the partners in the organisation and management of the business. Some partners may specialize in production, marketing and administration of the business.

i. **Employment Opportunity:** In comparison with the single proprietorship, the large size of the partnership made possible by its enough capital, make it possible to offer more employment to people.

2.3.5 Disadvantages of Partnership

1. Limited Capital: Unlike the limited liability company, the partnership has no legal right to obtain more capital through shares from members of the public.

2. Unlimited Liability: If the business goes into liquidation, the partners will lose all the capital they contributed and if not enough, they will sell their personal properties in order to offset the remaining debts.

3. Partnership is not a Legal Entity: The business is not a separate legal entity. A partnership cannot sue or be sued in its own right. The partners can be sued separately or jointly as a result of any breach of contract on the part of the business.

4. Disagreement between Partners: Disputes and arguments may arise among the partners especially if it is felt that some members are not contributing enough to the success of the business. Quarrels may lead to litigation which could eventually cause a total dissolution of the business.

5. Slow Decision Making: Decisions take a longer time to be reached than in the single proprietorship. This is as a result of the fact that many people must be consulted before any major decision or policy is taken.

6. Exit of a Partner may end the Business: The death or withdrawal of a partner may lead to the end of the partnership. If a partner dies, his relatives may want to withdraw his share in the business. Therefore, the continuity of the business may be adversely affected.

7. Decrease in Personal Interest: The interest the partners will show in the business will be minimal because the business is not one person‟s affair.

8. Lack of Mutual Trust among Members: It is difficult to obtain, and subsequently difficult to maintain the mutual confidence so essential for this type of business enterprise.

Self-assessment exercises:

1. **What are the characteristics of Partnership?**
2. **Explain the advantages of Partnership.**

2.4 Conclusion

In this unit, we have discussed partnership as a form of business ownership. Under this section, we explain the meaning of partnership and the types of partnership. We further describe the characteristics features of partnership. In addition, we highlighted the advantages and disadvantages of partnership as a form of business ownership.

2.5 Summary

In this unit, we have learnt that:

· Partnership is a relationship which exists between two or more persons carrying on business with a view to making profit.

· The number of partners may vary from a minimum of two to a maximum of twenty. · People wishing to form themselves into partnership should draw up a deed of agreement or article of partnership.

· There are two major types of partners: ordinary or active partners and limited or sleeping partners.

· The characteristic features of partnership highlighted include: Form of ownership, type of liability, source of capital, motive of its formation, the legal status, method of withdrawing capital and nature of the business.

· The areas touched under the advantages of partnership include: capital supply, quality of decision making, fair sharing of risks and liabilities, prospect of business continuity, existence of privacy in the business, cordial relationship between partners and their customers and employees, possibility of multiple occupations, possibility of specialisation and division of labour, etc.

· The major disadvantages highlighted in this unit include: Limited capital, unlimited liability, partnership is not a legal entity, possibility of disagreement between partners, slow decision making, exit of one partner may end the business, decrease in personal interest and lack of mutual trust among members.

2.6 References/Further Reading/Web Sources

Anyaele J.U. (1990). *Comprehensive Economics* for Senior Secondary Schools. Lagos: Johnson Publishers Ltd.

Anyanwuocha R. A. E. (2001). *Fundamentals of Economics* for Senior Secondary Schools. Onitsha: Africana – FEP Publishers Ltd.

2.7 Possible Answer To Self-Assessment Exercise(S) Within The Content.

1.

The main features or characteristics of partnership include the followings:

· The Legal Status: The business is not a separate legal entity and cannot therefore sue or be sued in its own name.

· Types of Liability: Partners have unlimited liability.

· Source of Capital: The partners contribute capital/skill according to the agreement reached. In return, each of them receives a proportion of the profits as agreed.

· Motive of its Formation: The motive of forming partnership is to make profit.
· The Legal Status: The business is not a separate legal entity and cannot therefore, sue or be sued in its own name.
· Nature of the Business: The business has no board of directors.
The control and management of the business is in the hands of the active partners.
· Method of Withdrawing Capital: Withdrawal of capital must be approved by other partners as laid down in their partnership deed.
· Mode of Operation: The partners usually take the major decisions together. They also bear the risks of the enterprise together.

2.The advantages of Partnership are:

1. Capital Supply: This form of business ownership offered better resources for starting and running a business than the sole proprietorship. This is because partnership required two to twenty people pooling their resources together. In addition, it will be easier for a group of people to borrow money in the bank to finance the business than individuals. This is because the group will be able to offer better collateral security than individuals.

2. Decision Making: There is the likelihood that better decisions would be taken. Since decisions are jointly taken, each partner will contribute his own ideas. The better ideas are taken since two heads are better than one.

3. Sharing of Risks and Liabilities: Business risks are shared among all the partners. Each partner is jointly liable with other members of the business for all the debts of the partnership. This reduces the liability of each partner in the event of business failure.

4. Prospect of Business Continuity: Unlike sole proprietorship, the death of one partner may not lead to a total dissolution of the business since the other partners can continue the business. Furthermore, a partner may take rest due to illness without adversely affecting the business.

5. Existence of Privacy in the Business: Like the single proprietorship, the partnership can keep its business affairs private since it is not required to make its accounts available for public inspection.
6. The Relationship between the Partners and the Customers:

7. There is still personal contact with both the customers and the employees of the business. This is because of the small size of the business when compared with corporate business

8. Multiple Occupations: Like the single proprietorship, partnership is allowed to set up more than one small business. In addition, each of the partners could still run another small business on his own.

9. Specialization and Division of Labour: As a result of different skills and talents possessed by partners, application of division of labour is possible. There could be specialisation among the partners in the organisation and management of the business. Some partners may specialize in production, marketing and administration of the business.

10. Employment Opportunity: In comparison with the single proprietorship, the large size of the partnership made possible by its enough capital, make it possible to offer more employment to people.

Unit 3 Corporate Or Limited Liability Companies

3.1 Introduction

My dear students I welcome you to Unit 3 of Module 4 of this Course AEA308 Principles of farm management.

In unit 2 of this module, we discussed partnership form of business organisation. Under partnership we discussed the meaning of partnership, types of partners and characteristic features of partnership. Other areas discussed are: advantages and disadvantages of partnership. In this unit, we shall discuss corporate organisation or Limited Liability Company. Under Limited Liability Company, emphasis will be on the type of Limited Liability Company, characteristics, formation, advantages and disadvantages.

3.2 Learning Outcome

By the end of the unit, you should be able to:

· explain the meaning of Limited Liability Company
· list the characteristics of Limited Liability Company
· explain the formation of Limited Liability Company · list the advantages of Limited Liability Company · list the disadvantages of Limited Liability Company.

3.2 **Main Content**

3.2.1 **Meaning of Corporate Organisation or Limited Liability Company**

Limited Liability Company is an expansion of the partnership principle. It aims at securing a better method of mobilizing financial resources.

The company comes into existence when a number of persons join together to invest their money in a common enterprise. The liability of

each investor for the debts of the business is limited to the amount of his capital invested in the company. The profits of the company are distributed in proportion to the shares subscribed and paid for. The limited liability company is owned and controlled by the shareholders. Each shareholder receives a share of the profits called the Dividend.
Limited Liability Companies are of two types – the private liability company and the public limited liability company or the joint-stock company. The two types are essentially the same. The major difference between them is that in private limited liability company, the number of owners who are shareholders ranges from two to fifty. In public limited liability company, the minimum number of shareholders is seven and there is no maximum number. In addition, private limited liability company is called private or closed because purchase of shares is restricted to only the founders. In contrast, public limited liability company is open to everybody in the society who is interested in the ownership of the company.

3.2.2 Characteristics of Limited Liability Company

1. Number of Shareholders: For private limited liability company, the number of shareholders range from two to fifty. For public Limited Liability Company, the number of shareholders starts from seven and no maximum.

2. Separate Legal entity: The business is a separate legal entity. It is recognized as a personality in law. The business can sue and be sued in its own name, without involving the owners. It is registered as a corporate body.

3. Limited Liability: The shareholders have limited liability. In the event of business failure, the amount which a shareholder can lose is limited to his share or capital he has invested in the business. His personal assets are protected by the law.

4. There is Continuity of Business: The withdrawal or death of a shareholder may not affect the existence of the company.

5. Board of Directors: There is Board of Directors who controls the business of taking most of the major day to day decisions.

6. Acquisition of Capital: Capital is raised through the issue of shares. Capital can also be raised through borrowing from financial institutions and issuing debentures.

7. Publication of Accounts: Corporate business organisation must have its account publicized usually annually. It must submit an audited balance sheet to the Registrar of Companies for inspection.

3.3.3 Formation of a Limited Liability Company

A. Filing of Documents with the Registrars: The first step in the formation of a Limited Liability Company involves filing of documents with the Registrar of Companies. Such documents include:
i. Memorandum of association ii. Articles of association iii. Names of the company directors, and iv. Letter of undertaking.

The memorandum of association will include:

· The relationship of the company with outside world
· Name of the company
· The business addresses
· Objectives of the company
· The nature of the shareholders‟ liabilities
· The amount and type of shareholders‟ capital, etc.
The articles of association give the rules and regulations guiding the operation of the company.
The document provides information on the following areas:
· The duties, rights and position of each member of the company
· Method of the appointment of directors
· The rights and powers of the directors
· How dividend are to be shared
· How general meetings are to be held
· Method of electing directors
· Voting rights of shareholders during elections
· Method of auditing the account of the company

B. The second step after the preparation and submission of the documents to the registrars of companies involved preparation of certificate of incorporation. If the registrar is satisfied that the business has met the necessary requirements for company formation, the registrar will then send a certificate of incorporation. The certificate of incorporation shows that the business has been recognized as a legal entity.

C. The third step is the submission of the company prospectus to the registrar of companies. The prospectus shows how the company has raised or wants to raise its capital.

D. The last step is the preparation of certificate of trading by the registrar of companies. The business can start functioning as soon as they receive trading certificate from the registrar of companies. All these legal procedures are necessary in order to protect the interested shareholders from being defrauded by a group of dubious people.

3.3.4 Advantages of Limited Liability Company

1. Legal Entity: The business has a separate legal entity and as a result, it is distinct from the owners. It can therefore, sue and be sued in its own right.

2. Limited Liability: In the event of business failure, the maximum amount a shareholder can lose is the amount of capital he has contributed to the business. His personal assets are protected by law.

3. Large Capital: The business has large resources of capital nbecause of the large number of shareholders in the company. The company also finds it easy to borrow money because of its many assets which can be used as collateral.

4. Sure of Continuity: There is continuity of the business on the death or illness of a shareholder. The misfortunes of a shareholder do not affect the existence of the company and its operations.

5. Transfer of Capital: The shares of a public Limited Liability Company are easily transferable for cash. This form of business ownership has the advantage of allowing the shareholders to transfer their capital at will if they feel dissatisfied with the company.

6. Specialisation is Possible: Division of labour is possible under this system of business ownership. Due to large number of people involved in running the business, the organisation is divided into various Departments. This leads to greater efficiency.

7. Risks Reduction among Owners: The business risks are shared among a large number of persons. The wider spread of risks results in reduced loss for each shareholder, in the event of business failure.

3.3.5 Disadvantages of Limited Liability Company

a. Difficult to Establish: Due to Government interest in this type of business organisation, the formalities for its establishment are usually very complicated. A number of requirements must be fulfilled before the business is registered as a company.

b. Required Large Amount of Capital: Apart from the formalities required, to establish the business, company also required huge amount of capital to start the business.

c. Delay in Decision Making: There is delay in taking decisions because of the relatively large size of the business. Before any major policy change can be adopted by the manager, a meeting of shareholders or the board of directors has to be convened. All these may take quite a long time.

d. Lack of Privacy: It is required by law for the company to make public all the financial activities and operations of the business.
All vital documents and information concerning the business are also sent to the registrar of companies for inspection. At times, annual report of the company is published in the dailies.

e. Ownership is Separated from Management: Since the shareholders who are the owners of the business are separated from the management of the business, there may be a negative attitude among the managers towards the interest of the shareholders. The managers may embezzle the company"s fund since the business is not their own.

f. Lack of Cordial Relationship between Employers andEmployees: Unlike single proprietorship and partnership, the size of this company makes cordial relationship with employers and customers/employees impossible. The shareholders may not know each other. The owners may range into thousands and are scattered throughout the country.

g. Decrease in Personal Interest: The type of interest, zeal and enthusiasms found in a business owned and controlled by one man is lacking in a Limited Liability Company. This is because the ownership is separated from the management.

Self-assessment exercises:

1. What are the disadvantages of Limited Liability Company?

2. List and discuss five advantages and five disadvantages of a Limited Liability Company.

3.4. Conclusion

In this unit, we have discussed the meaning of a Limited Liability Company. We also discovered the two types of Limited Liability Company. The characteristic features of corporate business were also highlighted. In this unit, we also further highlighted the advantages and disadvantages of Limited Liability Company.

3.5. Summary

In this unit, we have learnt that:

· Corporate business is an association of individuals who agree to and jointly pool their capital together in order to establish and own a business.

·There are two types of Limited Liability Company – private Limited Liability Company and public Limited Liability Company.

· The characteristic features or Limited Liability Companies highlighted include: the number of shareholders, separate legal entity, limited liability, business continuity, there is board of directors, acquisition of capital and publication of accounts.

· There are four essential steps in the formation and establishment of a Limited Liability Company – filing of documents with the registrar of companies, preparation of certificate of incorporation, submission of company‟s prospectus and preparation of certificate of trading.

· The important areas touched under the advantages of corporate business include: legal entity,
limited liability, large capital, prospect of continuity, transfer of capital, possibility of specialization and reduction in risks among owners.

· The major disadvantages highlighted include: difficult to establish, required large amount of capital, delay in decision making, lack of privacy, lack of cordial relationship between employer and employees, and decrease in personal interest.

3.6 References/Further Reading/Web Sources

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

Anyaele J.U. (1990). *Comprehensive Economics* for Senior Secondary Schools. Lagos: Johnson Publishers Ltd.

Anyanwuocha R. A. E. (2001). *Fundamentals of Economics* for Senior Secondary Schools. Onitsha: Africana – FEP Publishers Ltd.

3.7 Possible Answer To Self-Assessment Exercise(S) Within The Content.

1. What are the disadvantages of Limited Liability Company?

a. Difficult to Establish: Due to Government interest in this type of business organisation, the formalities for its establishment are usually very complicated. A number of requirements must be fulfilled before the business is registered as a company.

b. Required Large Amount of Capital: Apart from the formalities required, to establish the business, company also required huge amount of capital to start the business.

c. Delay in Decision Making: There is delay in taking decisions because of the relatively large size of the business. Before any major policy change can be adopted by the manager, a meeting of shareholders or the board of directors has to be convened. All these may take quite a long time.

d. Lack of Privacy: It is required by law for the company to make public all the financial activities and operations of the business.

All vital documents and information concerning the business are also sent to the registrar of companies for inspection. At times, annual report of the company is published in the dailies.

e. Ownership is Separated from Management: Since the shareholders who are the owners of the business are separated from the management of the business, there may be a negative attitude among the managers towards the interest of the shareholders. The managers may embezzle the company‟s fund since the business is not their own.

f. Lack of Cordial Relationship between Employers andEmployees: Unlike single proprietorship and partnership, the size of this company makes cordial relationship with employers and customers/employees impossible. The shareholders may not know each other. The owners may range into thousands and are scattered throughout the country.

g. Decrease in Personal Interest: The type of interest, zeal and enthusiasms found in a business owned and controlled by one man is lacking in a Limited Liability Company. This is because the ownership is separated from the management.

2. List and discuss five advantages and five disadvantages of a Limited Liability Company.

Advantages of Limited Liability Company

1. Legal Entity
2. Limited Liability
3. Large Capital
4. Sure, of Continuity
5. Transfer of Capital

1. Legal Entity: The business has a separate legal entity and as a result, it is distinct from the owners. It can therefore, sue and be sued in its own right.

2. Limited Liability: In the event of business failure, the maximum amount a shareholder can lose is the amount of capital he has contributed to the business. His personal assets are protected by law.

3. Large Capital: The business has large resources of capital nbecause of the large number of shareholders in the company. The company also finds it easy to borrow money because of its many assets which can be used as collateral.

4. Sure, of Continuity: There is continuity of the business on the death or illness of a shareholder. The misfortunes of a shareholder do not affect the existence of the company and its operations.

5. Transfer of Capital: The shares of a public Limited Liability Company are easily transferable for cash. This form of business ownership has the advantage of allowing the shareholders to transfer their capital at will if they feel dissatisfied with the company.

Disadvantages of Limited Liability Company

1. Difficult to Establish
2. Required Large Amount of Capital
3. Delay in Decision Making
4. Lack of Privacy
5. Ownership is Separated from Management

a. Difficult to Establish: Due to Government interest in this type of business organisation, the formalities for its establishment are usually very complicated. A number of requirements must be fulfilled before the business is registered as a company.

b. Required Large Amount of Capital: Apart from the formalities required, to establish the business, company also required huge amount of capital to start the business.

c. Delay in Decision Making: There is delay in taking decisions because of the relatively large size of the business. Before any major policy change can be adopted by the manager, a meeting of shareholders or the board of directors has to be convened. All these may take quite a long time.

d. Lack of Privacy: It is required by law for the company to make public all the financial activities and operations of the business.
All vital documents and information concerning the business are also sent to the registrar of companies for inspection. At times, annual report of the company is published in the dailies.

e. Ownership is Separated from Management: Since the shareholders who are the owners of the business are separated from the management of the business, there may be a negative attitude among the managers towards the interest of the shareholders. The managers may embezzle the company's fund since the business is not their own.

Unit 4 Cooperative Society

4.1 Introduction

My dear students I welcome you to Unit 4 of Module 4 of this Course AEA308 Principles of farm management

In unit 3 of this module, we discussed Limited Liability Company as a form of business ownership. In the unit, we defined Limited Liability Company and identified the two major types of such organisation. We also looked at the characteristics of Limited Liability Company that distinguished it from other forms of business. We further discussed the processes involved in the formation of corporate organisation. Finally, we discussed the advantages and disadvantages of such business organisation. In the last unit of this module, we are going to concentrate our efforts in discussing cooperative as a form of business organisation. The topics covered include – the meaning of cooperative, characteristics of cooperative, types of cooperative, advantages and disadvantages of cooperative.

4.2 Learning Outcome

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

· define cooperative society
· list the characteristic features of cooperative societies
· describe the various types of cooperative societies
· list the advantages of cooperative societies as a form of business · list the disadvantages of cooperative societies.

4.3 Main Content

4.3.1 Meaning of Cooperative Society

Cooperative is a form of business voluntarily owned, organised and upgraded by members for their mutual benefits. Unlike corporate business, the control is on their members and no individual is allowed to have controlling share. It is expected that most of the business of cooperative should be carried out with the member's patron, therefore, after paying all costs, the profit or surplus is returned to members in the form of patronage refund. If cooperative operate along such lines, they obtain certain kind of assistance from Government and they are usually exempted from taxes. The primary purpose of a cooperative business is to give good service to its members and to return any surplus or profit arising from this operation to its owners.

3.2 Characteristics of Cooperative Societies

1. **Open Membership:** This principle implies that cooperative business should be opened to all those who are interested. There is no limit to the size of its membership. It is usually opened to persons with similar interests who wish to join.

2. **Democratic Control:** This principle implies the concept of one man one vote. Each member has one vote only and can stand for election into any office. They have equal rights. All the members take part in any major decision taking.

3. **Limited Return on Capital:** Cooperative societies exist primarily to provide services to their members at the lowest possible cost; hence, cooperators should not expect to make large returns on their invested capital.

4. **Patronage Dividend:** Profit made is shared to members according to their share contributions.
This is meant to encourage people who are able to contribute more in the society to do so.

5. **Cash Transaction Only:** Members of the cooperatives are expected to purchase or sell produce strictly on cash basis. This means that no credit is allowed.

6. **Religious or Political Neutrality:** This implies that membership of cooperative society should be opened to all irrespective of religion, political or ethnic differences. This principle demonstrates the role of cooperative as a unifying factor in the society.

7. Constant Education of Members: Members could be trained on simple farm hygiene, livestock management, new production techniques like yam, fish farming, e.t.c. Cooperative education also helps to enlighten members on the importance of cooperation.

3.3 Types of Cooperative Society

1. Producers Cooperative Society: Producers cooperatives or group farming cooperatives are organised in order to enable small farmers reap the benefits of large-scale farming, collective purchase and use of heavy machinery and other equipments.
Through such societies, improved farming methods can be practiced. Members of this society contribute money in order to buy or hire equipment, machinery and raw materials at reduced rates meant for the promotion of their productive activities.

2. Consumers Cooperative Society: These are more concern with the sales of manufactured goods to members at minimum cost.
Members pool their resources together in order to buy goods in bulk from the manufacturers. They by-pass the middlemen in order to get these goods at cheaper rates and then distribute to their members.

3. Marketing Cooperative Society: The main objective of this society is to arrange for the sale of members‟ produce to encourage members to produce crops of high quality and promote cooperative spirit among the members. In addition, marketing cooperatives also provide loans and savings facilities to their members.

4. Thrift and Credit Cooperative Society: The aims of thrift and credit Cooperative Society are the provision of savings facilities and the granting of loans to members. Credit limits are fixed for all members in relation to their savings. The rate of interest charged on loans varies but are generally low.

5. Multipurpose Cooperative Society: As the name implies, these types of organisation discharge two or more functions. Most multipurpose cooperatives assist members to purchase farming tools and other essential materials. They serve as village banks where members can keep savings and obtain loans. They also serve as agents for the distribution of fertilizers and improved seeds and seedlings. Some of them combine production with marketing and processing.

6. Other Cooperative Society: Other forms of cooperative societies exist, they include:
agricultural processing cooperatives, fishery cooperative society, farmers consumer cooperative society, service cooperative society, e.t.c.

4.3.4 Advantages of Cooperative Societies

a. Encouragement of Savings: Cooperative thrift and credit societies encourage their members to save their money. This function is very important in Nigerian rural areas where commercial banks are very few. Left on their own, the individuals may not be able to save enough money for investment purposes.

b. Provision of Loans: Cooperatives can raise loans for agricultural practices or other forms of production easily and at low interest rates. Cooperatives can borrow money more easily in bank than individual farmers. This is because they are in a better position to offer more collateral than individual farmers.

c. Education and Training of Members: Cooperatives educate their members in the area of production, distribution, consumption and marketing of goods and services.

d. They are Democratic in Nature: All members of the cooperative society have equal right to vote and be voted for. They have equal right to say how the society should be organised. In this way, cooperative society provides training in self-government business management for its members.

e. They Prevent Price Fluctuation: The motive of forming cooperative society is not to make profit but to protect the welfare of their members. They buy most of their products in bulk and sell to members at low costs. This results in low prices of goods.

f. Avoidance of Cheating and Hoarding: Cooperative societies are known for open service. The satisfaction of members is the ultimate goal of cooperatives. Since their members are their immediate customers, they can not afford to cheat their members.
Hoarding is also avoided by the society.

g. Increased Standard of Living: Through cooperative societies, farmers have access to loans to increase their production capacity as well as to purchase essential items for the family. Cooperatives also purchase some manufactured goods and distribute same to members. All these are aimed at improving the living conditions of members.

h. Promote Unity Among Members: Members of cooperatives are known to each other. They meet regularly and take decisions collectively. This personal interaction between members encourage inter- personal relationship among them.

4.3.5 Disadvantages of Cooperatives

i. Low Capital Base: This problem arises because of the poor background of most rural farmers who form the bulk of these societies. Another problem is the unwillingness of members to pay up their subscriptions.

ii. Political Influence: Even though cooperatives are not supposed to be in politics. Many of the societies have found their ways into politics. Some were forced to declare for a particular political party as against the wish of some members thereby causing conflict and rifts among them.

iii. Illiteracy of Members: Most members of cooperative societies in Nigeria are illiterates. The result is that most of them may be ignorant of the potential gains of cooperative. Apart from the gains, illiterate members may not understand the working and principles of these societies.

iv. Weak Management: Cooperative officers are drawn from among members who are mainly farmers; they may lack administrative and managerial competence to handle the business efficiently.

v. Possibility of Embezzlement: Reports of embezzlement of cooperative fund is very rampant.
Some cooperative officers connive to use societies‟ money for their selfish benefits.

vi. High Rate of Loan Default: Occurrence of loan default is very common among cooperative members. Loan default occurs within the societies as well as the loan guaranteed by the societies from the banks. Most loans granted through cooperative societies are usually without much collateral security. Most members usually enjoy the loan but only few pay back the money in full.

vii. Low Membership: Unlike Limited Liability Company, there is still low membership of cooperatives in Nigeria. Even though there is no limit to the number of shareholders, only few people join cooperative business. This problem is probably due to lack of proper understanding of the principles and ideals of cooperatives.

Self-assessment exercises:

1. What is a cooperative society?

2. List and discuss any five types of agricultural cooperatives known to you.

4.4 Conclusion

In this unit, we have discussed the meaning of cooperative society. We have also discussed the characteristics of cooperatives that distinguish it from other forms of business. The various types of cooperative societies available were also discussed. The benefits derived from joining cooperatives were highlighted. Finally, the problems associated with cooperative movements were equally highlighted and discussed.

4.5 Summary

In this unit, we have learnt that:

· Cooperatives are business organisations jointly organised, funded and operated for the mutual benefits of members.

· Some of the features of cooperatives that distinguish it from other forms of business organisations include: open membership, democratic control, limited return on capital, dividend based on patronage, cash transaction only, religion and political neutrality and education of members, etc.

· Many types of cooperatives exist. They include: Producers‟ cooperatives, consumers‟ cooperatives, marketing cooperatives, thrift and credit cooperatives, multipurpose cooperatives, etc.

· Some benefits of joining cooperatives include: encouragement of savings, provision of loans, education and training of members, cooperative is democratic in nature, they prevent price fluctuations, they avoid cheating and hoarding of goods and improve the standard of living of members.

· The major disadvantages discussed include: low capital base, political influence, illiteracy of member, weak management, embezzlement of members‟ fund, high rate of loan default and low membership.

4.6 References/Further Reading/Web Sources

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4.7 Possible Answers To Self-Assessment Exercises.

Answers:

1.

Cooperative is a form of business voluntarily owned, organised and upgraded by members for their mutual benefits. Unlike Limited Liability Company, the control is on their members and no individual is allowed to have controlling share. It is expected that most of the business of cooperative should be carried out with the member's patron, therefore, after paying all costs, the profit or surplus is returned to members in the form of patronage refund. If cooperative operate along such line, they obtain certain kind of assistance from government and they are usually exempted from taxes. The primary purpose of a cooperative business is to give good service to its members and to return any surplus or profit arising from this operation to its owners.

2. List and discuss any five types of agricultural cooperatives known to you.

i. **Producers Cooperative Society**: Producers cooperatives or group farming cooperatives are organised in order to enable small farmers reap the benefits of large scale farming, collective purchase and use of heavy machinery and other equipments. Through such societies, improved farming methods can be practiced. Members of this society contribute money in order to buy or hire equipment, machinery and raw materials at reduced rates meant for the promotion of their productive activities.

ii. **Consumers Cooperative Society**: These are more concern with the sales of manufactured goods to members at minimum cost. Members pool their resources together in order to buy goods in bulk from the manufacturers. They by-pass the middlemen in order to get these goods at cheaper rates and then distribute to their members.

iii. **Marketing Cooperative Society**: The main objective of this society is to arrange for the sale of members' produce to encourage members to produce crops of high quality and promote cooperative spirit among the members. In addition, marketing cooperatives also provide loans and savings facilities to their members.

iv. **Thrift and Credit Cooperative Society**: The aims of thrift and credit cooperative society are the provision of savings facilities and the granting of loans to members. Credit limits are fixed for all members in relation to their savings. The rate of interest charged of loans varies but are generally low.

v. **Multipurpose Cooperative Society**: As the name implies, these types of organisation discharge two or more functions. Most multipurpose cooperatives assist members to purchase farming tools and other essential materials. They serve as village banks where members can keep savings and obtain loans. They also serve as agents for the distribution of fertilizers and improved seeds and seedlings. Some of them combine production with marketing and processing.