

WEEK S	TOPICS	Learning Objectives: By the end of the lessons, students should be able to:
1	Revision of last term's work / Welcome Test	Revision – crop pest and method of controls
2	Factors of agricultural production – LAND	Meaning of land, characteristics, importance or uses of land
3	Factors of agricultural production – water	Meaning , types , sources, uses, of water, irrigation
4	Factors of agricultural production – Labour	Meaning of labour, types, reward, importance
5	Factors of agricultural production – Capital	Meaning of capital , features, sources, importance of reasons why we need capital , types of capital
6	Factors of agricultural production- farm manager	Meaning of farm manager, functions of farm manager, problem faced by farm manager, solutions using of management
7	Mid Term Test	Mid-term break / Open day
8	Simple farm tools	Identify some simple farm tools, function of each tools, general maintenance of farm tools , uses or importance
9	Economic empowerment through agriculture	Meaning , purpose, benefits or importance, challenges and solutions in Nigeria
10	Field Trip-Excursion to an established farm	Write a report on their observation at site excursion on the school farm
11	Revision	Revisions and Final Examination
12	Revision	Revisions and Final Examination
12-13	Revision	Revisions and Final Examination

REFERENCES

UNIFIED SCHEME OF WORK

WEEK: 1 **DAY:** **SUBJECT:**

DATE: **TOPIC:**

SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Definition of Weed of Pest
2. Types and Classification of pests
3. Physical control, Chemical control and Biological control

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT:

REVISION QUESTIONS

1. What is a pest?
2. Mention two classes of pests.
3. What are weeds?
4. List five examples of weeds
5. State three features of weeds.
6. Describe four methods of controlling weeds
7. What is a pest?
8. State two types of insect-pests with two examples of each.
9. Mention five possible damage done by pest to crop

READING ASSIGNMENT

Junior Secondary Agriculture for Nigerian Schools Bk 1 by A. Youdeowei, B.K .Kaigama, J.N. Ogbazi, S.O. Adesiyun. Chapter 14 pages 76-81.

WEEKEND ASSIGNMENT

1. Herbicides are applied to the soil or to weed plants with machines known as ____ A. Spreader B. Sprayers C. Tractors D. weeders.
2. Chemicals which can help to kill weeds are best known as A. larvicides B. Insecticide C. Herbicide D. Rodenticides.
3. Which of these is very difficult to use if the number of pest is high? A. chemical control B. physical control C. biological control D. cultural control.
4. The following are effects of weed except A. They make land cultivation difficult B. Weeds compete with cultivated crops for the nutrients in the soil C. Transmission of insects, fungi and other organism harmful to crops D. They results in the increase in value and quality of farm produce.
5. ____ involve the use of natural enemies of insect pests and weeds against them A. physical control B. chemical control C. cultural control D. biological control.

THEORY

1. Define pest.
2. List four methods of controlling weeds.

WEEK: 2 **DAY:** **SUBJECT:**

DATE: **TOPIC:**

SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

- **INTRODUCTION, The meaning of Production**
- **DEFINITION**
- **CHARACTERISTICS OF LAND**
- **USES OF LAND**

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: FACTORS OF PRODUCTION (LAND)

Production is the process of combining and converting input to give rise to output. This process is aided by Land, Labour, Capital and Management (Entrepreneurship) all otherwise referred to as factors of production. So therefore factors of production are the resources that ensure the production of goods in agriculture.

Land refers to where productive activities such as growing of crops, rearing of animals and establishment of farmstead, e.t.c are carried out. it is the most important asset of the farmer. Land for agricultural production can be acquired in the following ways

1. Purchase: out rightly buying the land and assuming full ownership.
2. Lease/Rent: paying the land owner (individual/government) a stipulated amount to gain access to using the land for a stipulated time.
3. Gift
4. Inheritance

Land is limited in supply (its amount cannot be increased in a geographical area) and thus its availability for agricultural practise is largely dependent on

1. Population growth (the more the people, the less the available land for agricultural practices)
2. Land tenure system: this refers to the way in which land is acquired.
3. Topography
4. Ecological and fertility status of the soil.
5. Economic factors such as cost of land, availability of capital to start up, cost of cultivating on the land, ease of transporting produce to the market, laws of the land etc.
6. Socio-cultural factors such as religious and traditional beliefs.
7. Climatic factors of the geographical area.

CHARACTERISTICS OF LAND

1. Land is the gift of nature or a natural resource.
2. It is immobile (fixed factor).
3. It is subject to law of diminishing returns.
4. The reward of land is rent collected from tenants.
5. Availability is subject to the Land Use Act in Nigeria.
6. It is limited in supply especially in highly populated areas.
7. Its suitability influences output

8. Its quality can be improved by various methods.
9. Its value is determined by its location
10. Land can appreciate or depreciate.

USES OF LAND

Land use is broadly divided into two:

1. AGRICULTURAL USES OF LAND

The following are uses of land to the farmer/in agriculture:

1. for forestry
2. for establishing game reserve/wildlife conservation.
3. for livestock production such as fish farming, apiculture, rearing pigs etc.
4. for crop farming.
5. as collateral for loans.

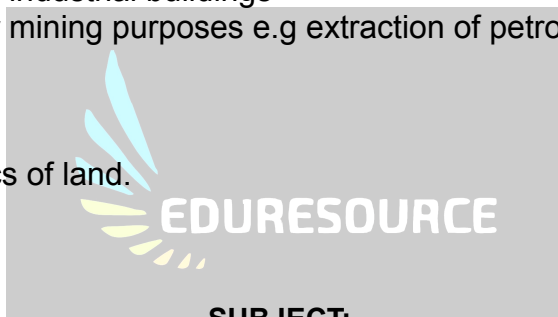
2. NON- AGRICULTURAL USES OF LAND

The following are non- agricultural uses of land

1. Land is used for construction purposes, e.g roads, airports etc.
2. Land is used for social or recreational purposes e.g. stadia, schools, markets, etc
3. Land is used for residential buildings.
4. Land can also be used for industrial buildings
5. Land can also be used for mining purposes e.g extraction of petroleum, gold, etc

EVALUATION

1. What is a land?
2. Mention five characteristics of land.



WEEK: 3 DAY: SUBJECT:

DATE: TOPIC:

SUBTOPIC: PERIODS: DURATIONS:

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Meaning of Water Consciousness
2. Importance or uses
3. Sources of water for agricultural purpose

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: FACTORS OF AGRICULTURAL PRODUCTION – WATER

Meaning of Water as a Factor of Production

Water is part of land as a free gift of nature used in production. This is an indispensable resource in agricultural production.

Importance of Water in Agricultural production

1. It is used for mixing cement for the construction of farm buildings.
2. It is used for drinking by man and farm animals.
3. It is used for watering seedlings.
4. Water is used for processing some farm produce.
5. It is used for washing farm tools, equipment, machinery, etc.
6. It is used for rearing fish.
7. It makes nutrients available to plants to grow on the field.



Sources of Water for Agricultural Purposes

1. Borehole
2. Stream
3. Lake
4. River
5. Spring
6. Dam

Irrigation- the artificial application of water to soil to supplement insufficient rain.

EVALUATION

1. Define water
2. State the importance
3. Mention 4 sources of water
4. Define Irrigation

ASSIGNMENT

1. Explain rain-fed

WEEK:

4

DAY:

DATE:

TOPIC:

SUBTOPIC:

PERIODS:

SUBJECT:

DURATIONS:

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Meaning of Labour and characteristics
2. Reward of labour
3. Types of labour of forms
4. Importance of labour to agricultural production

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: FACTORS OF AGRICULTURAL PRODUCTION – LABOUR

Labour includes all forms of productive human efforts put into or utilized in production. It also refers to man's mental and physical exertions generated to aid the process of production.

FEATURES OF LABOUR are:

1. it is mobile
2. it feelings and cannot be used anyhow.
3. the unit of labour is man-hours or man-days.
4. the reward of labour is wages and salaries.
5. it is a variable asset.
6. its size and quantity influence production or output.
7. its output can be improved by training.

EVALUATION

1. What is labour?
2. State five features of Labour.

TYPE OF LABOUR

The type of labour an individual provides is dependent on the training or education he or she received. The following are types of labour:

1. Skilled labour: highly educated and technical to provide the expertise for farm operations.
2. Semi-skilled labour: averagely educated to perform simple farm operations.
3. Unskilled labour: basic education to communicate and provide manual effort for farm operations.

FORMS OF LABOUR

Forms of Labour available to farmers are:

1. Personal labour: this is the labour provided by the owner of the farm.
2. Family Labour: these refer to the labour provided by the man, his wife and children i.e. the farmer's family.
3. Communal Labour: This is the kind of labour provided by neighbours and the community.
4. Hired or Paid Labour: this is the kind of labour that is paid either daily or they receive salary at the end of the month.

USES/IMPORTANCE OF LABOUR IN AGRICULTURAL ENTERPRISE

1. It uses other factors for production.
2. Skilled labour provides the expertise required for major farm operation.
3. Labour ensures the success of any agricultural enterprise.
4. It helps to achieve the various stages of agricultural production.
5. It converts natural resources into usable products.

GENERAL EVALUATION

1. Define Labour
2. Mention five characteristics of labour.
3. List and explain types of labour.
4. State five importance of labour in agriculture.

READING ASSIGNMENT

Essential agricultural science for senior secondary school by O. A. Iwenap. 349 – 350.

WEEKEND ASSIGNMENT

1. ____ is the type of labour provided by the owner of the farm A. Family labour B. Personal labour C. Hired labour D. Communal labour
2. The man's mental and physical exertions generated in the process of production is refers to as ____ A. Land B. Capital C. Labour D. Salary
3. ____ labour provides the expertise required for major farm operation. A. Communal B. Paid C. Skim D. Skilled
4. ____ and ____ is the reward of labour A. Profit and loss B. Wages and interest C. Loans and salaries D. wages and salaries.
5. The unit of labour is ____ A. man-hours/days. B. Man-minutes/week C. Man-month D. Man-hour/year

THEORY

1. What is labour?
2. Explain any four forms of labour you know.



WEEK: 5 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Meaning of Capital
2. Sources of capital
3. Types of capital
4. Characteristics of capital
5. Uses of capital

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: FACTORS OF AGRICULTURAL PRODUCTION – CAPITAL

Capital includes all man-made productive assets which are used in production. It in most cases is referred to as money used to start up and keep running a farming venture. It is broadly divided into fixed and working (variable) capital.

TYPES OF CAPITAL

1. Fixed Capital: these are capital or assets purchased for continuous use in production. In other words, these are items or materials which are not used up during production. E.g Farm buildings, motor vehicles, farm tools and implements, tractors, incubators, irrigation equipment, etc.
2. Working or Variable Capital: these are capital or assets which are used up during the process of production. Examples include: Water, feeds, drugs, cash in hand, vaccines, litters, fertilizers, seeds, chemicals, etc.

SOURCES OF CAPITAL

Avenue from which a farmer can get money to start or ensure smooth running of a farming venture includes:

1. Personal savings
2. Gifts from friends
3. Grants or aid from government and other organisations
4. Loan from friends
5. Loan from family members
6. Loan from banks and other financial institutions
7. Loan from government.

CHARACTERISTICS OF CAPITAL

1. It can depreciate or appreciate.
2. The reward for capital is interest.

EVALUATION

1. What is capital?
2. Mention two characteristics of capital.

IMPORTANCE OF CAPITAL IN AGRICULTURAL ENTERPRISE

1. It is used to establish farm enterprise
2. Working capital is used in the day-to-day running of the farm enterprise.
3. Working capital is used for paying wages.
4. Working capital is used for the purchase of farm inputs, maintenance services on the farm, and feeding of livestock,
5. Fixed capital in form of immovable houses and farmsteads provide shelter for farm operations
6. Fixed capital in form of machinery provides farm power for farm operations.
7. Fixed capital is used to generate more funds
8. Fixed capital is used to facilitate farm expansion or increase farm size.

GENERAL EVALUATION

1. Define capital.
2. List the types of capital you know.
3. Mention two characteristics of capital.
4. State five importance of capital in an agricultural enterprise.

READING ASSIGNMENT

Essential agricultural science for senior secondary school by O. A. Iwenap:350 – 351.

WEEKEND ASSIGNMENT

1. Working capital is used for the following except A. purchase of farm inputs
B. maintenance services on the farm C. To achieve the various stages of agricultural production D. feeding of livestock.
2. The following are variable capital except A. vaccines B. fertilizers C. Incubators
D. chemicals.
3. Materials that are not used up during production are known as ____ A. Working capital B. Fixed capital C. Land capital D. Farm capital.
4. ____ is the reward of capital. A. Wages B. Rent C. Interest D. Salary.
5. Fixed capital is ____ A. Moveable B. Irreplaceable C. Immovable D. Replaceable.

THEORY

1. What is Capital?
2. State five importance of Capital in Agricultural Enterprise.

WEEK: 6 **DAY:** **SUBJECT:**

DATE: **TOPIC:**

SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Meaning of Farm manager , management
2. Functions of farm manager
3. Reasons
4. Problems of farm manager
5. Solutions in form of management

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: FACTORS OF AGRICULTURAL PRODUCTION – FARM MANAGER

Farm manager is one who co-ordinates, organizes and controls the use of other factors of production to produce goods and services. In other words, the work of management is carried out by a farm manager. Decision and duties such as when to produce, what to produce, type of production, supervision of work, recruitment of workers, and determination of what and when to sell in order to make profit depends on (farm manager) management.

FUNCTIONS OF FARM MANAGER

The functions of a farm manager can be grouped into five major headings:

1. Organization
2. Administration
3. Production
4. Marketing
5. Evaluation

EVALUATION

1. What is management?
2. List five functions of a farm Manager.

1. **Organization function: this involves putting together all factors of production during productive activities. These functions includes** securing suitable land for farming, determining what to produce, determining the scale of production, procuring loan or capital for farming, recruiting or employing workers for the farm etc.
2. **Administration function: this involves ensuring good and effective working of all factors of production. These duties includes** supervision of the work on the farm, arrangement work roasters, directing workers on day-to-day activities, ensuring staff welfare, organizing training of man-power in the farm, etc.
3. **Production function: involves the right combination of the factors of production to ensure optimal yield. Part of the function includes** purchasing and using of farm inputs, ensuring the health of animals and crops on the farm, making arrangement for general security of the farm, ensuring the adequate supply of feeds, adheres to modern farming techniques, etc.
4. **Marketing function: this involves meeting sales target. To ensure this, the farmer** determines the quantity of produce to sell and price at which to sell, determines the best marketing channel to use to make maximum profits, determines when to sell to make maximum profit, monitors marketing trends, arranges for storage and warehousing of unsold produce, etc.
5. **Evaluation function: involves ensuring that other functions have been done appropriately. To effectively do this, he** keeps the general records of activities on the farm, supervises accounts and bookkeeping of all operations on the farm, analyses farm operations with respect to targets and

objectives, assesses the staffing conditions, develops new strategies for further improvement of farm operations, etc.

EVALUATION

1. What is management?
2. List five functions of a farm Manager.

GENERALEVALUATION

1. Define management
2. Briefly highlights the function of a Farm Manager based on
 - a. Organization
 - b. Administration
 - c. Production
 - d. Marketing
 - e. Evaluation

READINGASSIGNMENT

Essential agricultural science for senior secondary school by O. A. Iwenapg. 364 – 365.

WEEKENDASSIGNMENT

1. Management in a farm determines the following except A. when to produce A. what to produce B. type of production, C. supervises work D. granting of loans
2. Procurement of loan or capital for farming activity is one of ____ functions of a farm manager A. Administration B. Production C. Organisation D. Marketing
3. The supervision of accounts and bookkeeping of all operations on the farm is carried out by ____ A. Farm treasurer B. bookkeeper C. Farm managers D. Farm supervisor
4. Which of the function of a farm manager entails caring for the health of animals/crops on the farm? A. Organisation B. Marketing C. Administration D. Production
5. Management determines the ____ of the farm. A. Production B. Enlargement C. Profitability D. Progress

THEORY

1. What is management?
2. Mention and briefly explain five major functions of a farm Manager.

PROBLEMS OF FARM MANAGER

Problems which a farm manager may face during the course of discharging his duties include:

1. Inadequate Information: He may lack information on where to buy farm inputs, or acquire information on new innovations, current prices of farm produce, etc.
2. Problems of Marketing: He may not know how and where to sell his produce, at what time to sell and at which price to sell to make maximum profit.
3. Inadequate Farm Input: Farm input like seeds, feed, fertilizers, chemicals, etc, may be inadequate, scarce and expensive to get.
4. Financial Problems: He may not have enough capital. Banks may not provide loans and produce may not sell at the right price to make more money to reinvest in the business.
5. Inadequate Personnel: He may not get the right management team to work on the farm. They may be too expensive to work on the farm.

6. Government Policies: Bad government policies like importation of food which is also produced by the farm manager may lead to losses, discouragement and may even result in the folding up of the business.
7. Transport Problems: He may not have a vehicle to do the running around, to deliver farm input and to take farm produce to the market.
8. Administrative Problem: He may lack the technical know-how, good human relationship with staff, and the condition of his health may affect the performance of his duties.

GENERAL EVALUATION

1. What is management?
2. List five major functions of a farm Manager.
3. Briefly explain five major functions of a farm Manager.
4. State eight functions of a farm manager.
5. Mention five importance of capital in an agricultural enterprise.

READING ASSIGNMENT

Essential agricultural science for senior secondary school by O. A. Iwena

WEEKEND ASSIGNMENT

1. The following are problems of faced by a farm manger except A. Problems of marketing B. Inadequate personnel: C. Adequate information D. Government policies:
2. Materials that are not used up during production are known as ____ A. Working capital B. Fixed capital C. Land capital D. Farm capital
3. Management in a farm determines the following except A. when to produce A. what to produce B. type of production, C. supervises work D. granting of loans
4. The man's mental and physical exertions generated in the process of production is refers to as ____ A. Land B. Capital C. Labour D. Salary
5. The supervision of accounts and bookkeeping of all operations on the farm is carried out by ____ A. Farm treasurer B. bookkeeper C. Farm managers D. Farm supervisor

THEORY

1. Briefly explain two major problems of a farm manager.
2. State three functions of a farm manager.

Management refers to the organization, coordination and control of all factors of production to ensure that the goals of the farm enterprise are met. The goals of any farm enterprise includes

1. Making profit
2. Reducing production cost
3. Providing quality produce (finished or raw)
4. Increase consumer base

FEATURES OF MANAGEMENT

The following are the features or characteristics of management in an agricultural enterprise:

1. Its quality influences output.
2. Its cost is determined by its quality and experience.
3. It is provided by man.
4. Its reward is profit.

IMPORTANCE OF MANAGEMENT are:

1. Ensures smooth running of the enterprise.
2. Ensures the enterprise is making profit.
3. Ensure the effective utilization of other factors of production.
4. Ensures that the goal of the farm enterprise are achieved.
5. Ensure that all records and accounts are adequately kept.

EVALUATION

1. Who is a farm manager?
2. List three characteristics of a farm manager.

WEEKEND ASSIGNMENT

1. ____ refers to the to the organization, coordination and control of all factors of production to ensure that the goals of the farm enterprise are met A. Management
B. Manager C. Enterprise D. Capital
2. The reward of management is ____ A. labour B. profit C. loss D. interest
3. The cost of management is determined by ____ A. qualification B. quality and inexperience C. quality and experience D. quantity
4. The goal of farm enterprise includes all but A. to make money B. to waste money C. to produce at the right time D. to increase consumer base
5. Management as a job does not involves A. keeping records B. making uninformed decisions C. determining what to produce D. purchasing farm inputs

THEORY

1. What are the goals of a farm enterprise?
2. Define management.



WEEK: 7 MID-TERM BREAK MID-TERM TEST OPEN DAY

WEEK: 8 **DAY:** **SUBJECT:**
DATE: **TOPIC:**
SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Meaning of Farm tools
2. Types of farms and identification
3. Function of each farm tools
4. General maintenance of farm tools
5. Importance of farm tools to farmers

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: SIMPLE FARM TOOLS

Meaning of Simple Farm Tools

Simple farm tools are simple, handy tools made up of metals and wooden handles where applicable and used mainly by peasant farmers. They are designed to help the hands to apply force in farm operations. They make the work easier, faster and safer.

Types of Farm Tools

These tools can be classified into the following;

- Farm and horticultural tools
- Workshop or accessory tools.

Farm and Horticultural Tools

These are simple tools used for cultivation of arable crops, fruit, vegetable and flowers. Example include cutlasses, hoes, rakes, hand forks, garden fork, shears, pick axe, spades, hand trowel, shovel, secateurs, watering can, harvesting sickle, head pan, wheel barrow, axe, pruning saw, budding knife, budizzor castrator, etc.

Workshop or Accessory Tools

These are tools used in workshop to repair or maintain farm implement and farm machines. They include hammer, spanner, screw driver, pliers, nut and bolt, chisel, hack saw, file, punches etc.

EXAMPLES OF SIMPLE

FARM TOOLS AND THEIR USES

- **HOE**



Hoe is an ancient and versatile agricultural and horticultural hand tool used to shape soil, remove weeds, clear soil and harvest root crops.

- **CUTLASS**



A cutlass is a short, broad sabre or slashing sword, with a straight or slightly curved blade sharpened on the cutting edge, and a hilt often featuring a solid cupped or basket-shaped guard. It is used for cutting weed or grasses on the farm.

- **SPADE**



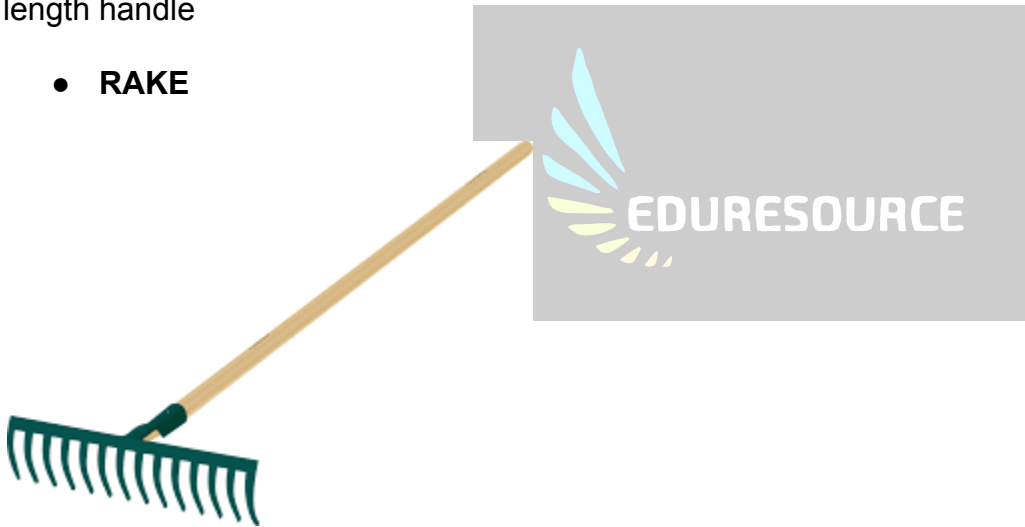
This is a tool with a sharp edged, typically rectangular, metal blade and a long handle, used for digging or cutting the earth, sand, turf and so on.

- **SHOVEL**



A shovel looks like a spade and is used for digging, lifting and moving bulk materials such as soil, coal, gravel, snow, sand or ore. Most shovels are hand tools that consist of a broad blade fixed to a medium length handle

- **RAKE**



It is an implement consisting of a pole with a toothed cross bar or fine tines at the end, used especially for drawing together cut grass or smoothing loose soil or gravel.

- **WHEELBARROW**



This is a small hand propelled vehicle, usually with just one wheel designed to be pushed and guided by a single person using two handles at the rear, or by a sail to push the ancient wheelbarrow by wind.

- **PICK AXE**



This is a hand tool with a hard head attached perpendicular to the handle. The head is usually made of metal and the handle is most commonly wood, metal and fiber glass.

- **HAND FORK**



When it is viewed, the hand fork, looks like the kitchen fork we eat with, just that it is a little bit bigger, it has a short wooden or metal handle with four prongs. It is used in mixing manure into the soil, for breaking the surface of the soil, so that air and water, can pass easily and it is also used for the removal of weeds on the seed bed.

- **HAND TROWEL**



EDURESOURCE

It is boat shaped or it is either curved sloop metal blade that is attached to a short wooden or metal handle. When using it, you hold it with one hand. It helps in the transplanting of seedlings, for the application of fertilizer and also for the application of manure to the soil, it helps in loosening vegetable beds, it can also be used for light weeding, sampling or mixing up of soil and digging holes for the planting of seeds.

- **THE SICKLE**



The sickle has a curved metal blade that is fitted into a short wooden handle. The inner part of the curved metal blade is very sharp while the other part, has a blunt edge.

To recognise a sickle when been viewed, it has a structure like that of a question mark (?). It used in the plucking of fruits. This can only be possible, when it is tied to a long handle, it can also be used to harvest cereals like rice, wheat barley because they possess thin stems. It can also be used in the harvest of grasses.

IMPORTANCE OF FARM TOOLS TO FARMERS

- They make farming processes more comfortable for farmers
- They are free and easier to use on the farm
- Without the tools on the farm, crops and livestock will not be raised and cultivate properly
- Without farming tools, no plants will be able to produce crops which is very important so that we can be able to have food

TOPIC: MAINTENANCE OF SIMPLE FARM TOOLS

CONTENT

The following maintenance practices or precautions are to be adopted to prolong the life span and effective use of farm tools

- 1 Tools should be washed or cleaned after use.
- 2 Oil, grease or lubricate movable parts to reduce friction.
- 3 Sharpen tools with blunt edges or blades regularly .e,g cutlass
- 4 Paint, oil or grease metallic parts to prevent rusting if they are to be kept for a long time.

- 5 Store tools in a cool dry place.
 - 6 Replace worn-out or damaged parts of farm tools.
 - 7 Check and tighten loose nuts and bolts daily or periodically.
 - 8 Remove tools with wooden parts away from the sun to avoid cracking.
 - 9 Keep metallic tools away from rain or moist places to avoid rusting.
 - 10 Keep tools with wooden handles away from termites and fire.
1. Handle tools with care and use them for the right farm operations.

EVALUATION

1. State five maintenance practices of farm tools.
2. Give two reasons why farm tools should be maintained

SUMMARY

GENERAL MAINTENANCE OF FARM TOOLS



Farm tools are made of metal or wood which are strong, these tools still need very good care so that they are always suitable for use in farming. The following are ways to ensure that they are used optimally:

1. Keep in a store free of termites (for tools with wooden parts).
2. Oil or grease metal parts
3. Paint metal parts if it is to be stored for long,
4. Sharpen blunt edges regularly to get optimum result.

5. Clean or wash after each use.
6. Keep nozzles free from blockage.

Self-evaluation:

1. List seven types of farm tools used for post-planting activities.
2. How can we maintain simple farm tools?

WEEK: 9 **DAY:** **SUBJECT:**

DATE: **TOPIC:**

SUBTOPIC: **PERIODS:** **DURATIONS:**

LEARNING OBJECTIVES: At the end of the lesson, students should be able to

1. Meaning of Economic empowerment
2. Explain economic empowerment through agriculture

KEY VOCABULARY WORDS:

INSTRUCTIONAL MATERIALS: Wall charts, Pictures, Related Online Video, Flash Cards

CONTENT: ECONOMIC EMPOWERMENT THROUGH AGRICULTURE

CONTENT OF THE LESSON

MEANING OF AGRICULTURE

Agriculture can be define as the growing of crops, rearing of animals, processing and selling of agricultural products for the benefit of man (for man's use).

COMPONENTS OF AGRICULTURE

There are four components of agriculture as stated in its meaning. These are

1. Growing or planting of crops. For examples – planting of rice, bean, yam, cocoa, banana, etc.
2. Rearing of animals. For examples – goat, sheep, horse, camel, etc.
3. Processing of agricultural products.
4. Selling of agricultural products.

Meaning of economic empowerment.

Economic empowerment involves giving money to the farmers in form of loan or grant and other necessary assistance to enable them improve and increase their agricultural production.

Economic empowerment entails putting money into one's hand and making one able to earn a living. Whatever man does, to get money, to meet the basic necessities of life and to make life more comfortable for him is regarded as been economically empowered.

EVALUATION:

- i. Describe the term economic empowerment.
- ii. What are the basic needs of life.

Sub-Topic 2: Economic empowerment through Agriculture.

Agriculture provides a means of economic empowerment to up to 75% of the population in diverse ways. Ways by which agriculture has empowered people include the following:

- i. cultivating crops,
- ii. rearing livestock,
- iii. sales of farm produce,
- iv. rendering services
- v. skill acquisition.

1. **Crop cultivation:** This involves preparation of land to plant crops for sale. Both food crops and cash crops can be produced to make money to earn a living.

2. **Rearing livestock:** Agriculture can put money into peoples' hand to solve their problems through rearing of animals. Livestock (like cattle, sheep, goat, poultry etc) provides a lot of products which could be sold to earn money. Empowerment is also provided as farm attendants and farm managers.

3. **Sales of farm produce :** Crops and animal produce are been sold to get money. Some buy in bulk from the farm as wholesalers while some are retailers.

1. **Rendering services:** Various assistance are needed by both crop farmers and livestock farmers. They can employ people to help them in their activities. People who are hired to do such work are duly paid. Examples of activities on farm are, farm cultivation, weeding, harvesting, packing of produce, loading , veterinary services.

5. **Skill acquisition:** This is the process by which one gains knowledge or learn how to do something well (skill) so as to practice it. E.g farmer can learn how to compound feed. This will help him to improve his productivity .Educating farmer on these new skills can also provide means of living for the teachers.

IMPORTANCE OF AGRICULTURE AS ECONOMIC EMPOWERMENT

Let's take a look at the agricultural sector and analyze some of its many benefits

- Major source of employment.
- Main source of food provision.
- Valuable contributor to Nigerian GDP (gross domestic product).
- Major source of foreign exchange.
- Major source of raw material for different industries.

PROBLEM AND SOLUTIONS

Agriculture business in Nigeria

Nigeria has many amazing natural resources. Still, the high GDP (compared to many other African countries) doesn't guarantee low poverty rate. A large number of Nigerians still live below the poverty line. While many citizens are employed in the agricultural sector, large number of Nigerians are still unemployed. Only about the third of all the arable lands are actually cultivated.

The development of the agricultural business is extremely important to the country. It can solve many current problems and improve the standard of living of millions of ordinary Nigerians. Here is how the new projects, farms, and businesses in the agricultural sector can be useful to the economy:

- Help to turn the focus of the economy from importation to exportation of the raw materials and food.
- Help create new jobs and reduce the level of poverty.
- Simplify life in urban and rural areas causing less migration between these areas.
- Help develop better infrastructure for moving products across Nigeria.
- Attract foreign investments into Nigeria.





This list can be longer if we go on. The importance of developing agricultural businesses and providing all the necessary conditions for local farmers and foreign investors is endless. It's up to the government to help develop this important sector of the economy and educate potential farmers as well as already established farmers on new and easier farming methods and the types of crops that bring higher revenue.



The sector needs intervention from the government. It needs innovation, capital, high skilled labor, effective transportation/distribution network and more. Only these changes can boost the agricultural sector's production capacity for local consumption and export.

WEEK: 10 Field trip (Excursion to an established farm) – Write a report on their observation apply what they learn at the site of excursion on the school farm.

WEEK: 11 REVISIONS

WEEK: 12 – 13 EXAMINATIONS

EVALUATION

- i. What do you understand by empowerment?
- i. List four ways of making money through agriculture
- ii. What is skill acquisition?

