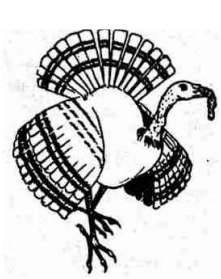
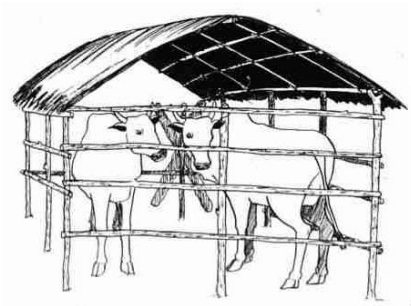
AGRICULTURE NOTES FOR STANDARD 5






Prepared by Francis Chinkhadze
(*chinkhadzef@gmail.com* 0993279030)

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Unit 1 Meaning of agriculture

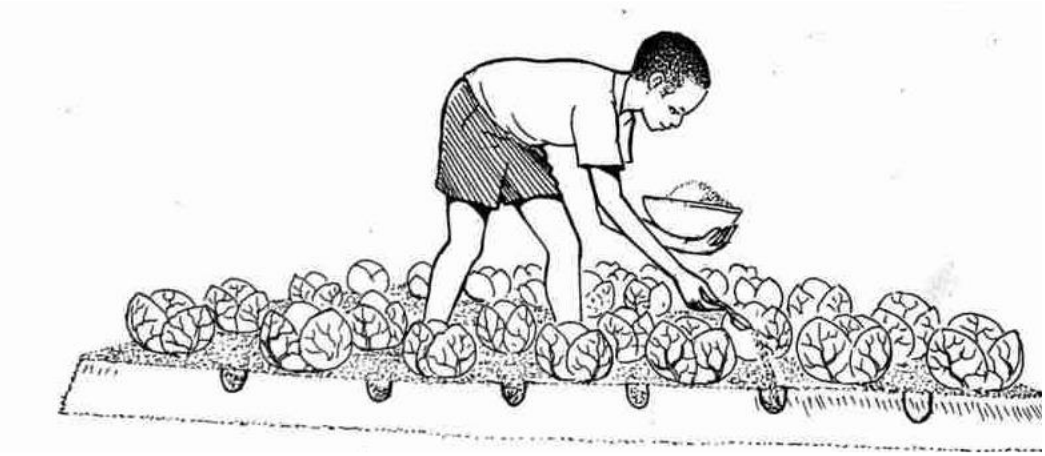
What is agriculture?

- Agriculture is the practice of growing crops and rearing animals on land for people's use.
- Agriculture is the art and science of growing crops and rearing animals on land for people's use.
- Agriculture is the job of growing crops and rearing animals on land for people's enjoyment.
- Agriculture is the task of growing crops and rearing animals on farm for profit.

Agricultural activities

- growing field crops
- growing vegetables
- growing fruits
- growing trees
- raising fish in ponds
- keeping bees
- keeping farm animals

Illustrations showing some agricultural activities



a: applying fertilizer in a vegetable garden

b: harvesting honey

Unit 2 Branches of agriculture

There are two main branches of agriculture namely:

a. Crop production
b. Animal production

Subbranches of agriculture

Subbranches of agriculture under crop production

- ✓ Agronomy
- ✓ silviculture
- ✓ horticulture
- ✓ arboriculture
- ✓ pomoculture

Subbranches of agriculture under animal production

- ✓ goat farming
- ✓ sheep farming
- ✓ pig farming
- ✓ cattle farming
- ✓ rabbit farming/rabbitry

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- ✓ olericulture
- ✓ agroforestry
- ✓ floriculture
- ✓ poultry farming
- ✓ fish farming
- ✓ apiculture/bee keeping

Meanings and examples of subbranches of agriculture

Subbranches of agriculture under crop production		
Subbranch	***Meaning***	***Examples***
Agronomy	is the growing of field crops	*Cotton, groundnuts, maize, beans*
Silviculture	is the growing of trees	*Mlombwa, pine, msangu, cassia, sambamfumu*
Horticulture	is the growing of fruits, vegetables, flowers and ornamental plants	*Tangerines, pineapples, pumpkins, cabbage, maligold, night queen, periwinkle*
Arboriculture	is the growing of ornamental plants	*Hibiscus, rose flowers*
Pomoculture	is the growing of fruits only	*Mangoes, bananas, oranges, apples*
Olericulture	is the growing of vegetables only	*Rape, mustard, amaranthus, chisoso*
Agroforestry	is the growing of field crops together with trees	*Maize and msangu, sorghum and Leucaena, millet and gricidia*
Floriculture	is the growing of flowers only	*Periwinkle, hibiscus*
Subbranches of agriculture under animal production		
Goat farming	is the keeping of goats	*Malawian goat, boer goat*
Sheep farming	is the keeping of sheep	*dorper*
Pig farming	is the keeping of pigs	*Large white, land race*
Cattle farming	is the keeping of cattle	*Zebu, brahman*
Rabbit farming/ rabbitry	is the keeping of rabbits	*Chinchilla, california*
Poultry farming	is the keeping of domesticated birds	*Chicken, ducks, guinea fowl, pigeon, turkey*
Fish farming	is the keeping of fish in ponds	*chambo*
Apiculture/ bee keeping	is the keeping of bees	*Honey bees*

Topic review questions

1. Mention the two branches of agriculture
2. State any three subbranches of agriculture under crop production
3. Give any four subbranches of agriculture under animal production

Unit 3 Importance of agriculture

- ✓ Source of income
- ✓ Source of employment
- ✓ Source of raw materials
- ✓ Source of foreign exchange

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- ✓ Source of food

Unit 4 Agriculture as a business

Business is any activity that people do with the aim of making profits.

Agriculture/farming is a business because farmers can grow crops and raise animals with an aim of making profits.

Aims of agriculture as a business

- Increasing yield per unit area
- Reducing cost per unit area
- Maximising profits

Types of farming methods

There are two main types of farming methods namely:

a. Subsistence farming
b. Commercial farming

Subsistence farming is the growing of crops and raising of livestock mainly for food.

Characteristics of subsistence farming

- ✓ Production of food to feed the family
- ✓ Production of crops and animals which are sold at low price
- ✓ Growing of crops on a very small area or keeping of very few animals
- ✓ Dependency mainly on rainfall
- ✓ Low level of inputs
- ✓ Uses mainly family labour and hand tools
- ✓ There are rarely a surplus for sale

Commercial farming is the growing of crops and raising of livestock mainly for sale.

Characteristics of subsistence farming

- ✓ Production is mainly for cash
- ✓ Crops and animals produced are sold for profit
- ✓ Growing of crops on a large area or many animals are raised
- ✓ High levels of inputs

Crops grown and animals raised by subsistence and commercial farmers

Subsistence farmers		**Commercial farmers**	
Crops	**Animals**	**Crops**	**Animals**
Maize	Ducks	Cotton	Cattle
Millet	Pigeon	Tea	Fish
Sorghum	Rabbits	Tobacco	Bees
Pigeon peas	Chickens	Coffee	Pigs
Rice	Guinea fowls	Sugarcane	
Cassava		Macadamia	

Note: crops and animals under subsistence farming can be produced for sale and it becomes commercial farming.

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Unit 5 Farm business activities

- Decision making
- Farm financing
- Record keeping
- Marketing

Decision making

Decisions which farmers can make

- What to produce
- How to produce
- How much to produce
- Where to buy or sell
- When to produce, buy or sell

Farm financing refers to finding money to run a farm business.

Sources of money

- Inheritance
- Grants
- Loans
- Personal savings
- From well wishers

Record keeping refers to the keeping of records of all the activities at the farm.

Helps the farmer to know if the farm business is making profit or loss.

Marketing is the selling of right products and services to the right customers at the right time, place and price.

Unit 6 Major elements of agricultural environment

Agricultural environment is everything around crop plants and farm animals.

The major elements of agricultural environment

- soil
- water
- plants
- animals
- sunlight
- wind/air

The agricultural environment

Living things	Non-living things	Condition
plants (grass, shrubs, trees)	soil (dust, gravel, stones)	sunlight (heat)
animals (pests)	water/moisture	wind
		air

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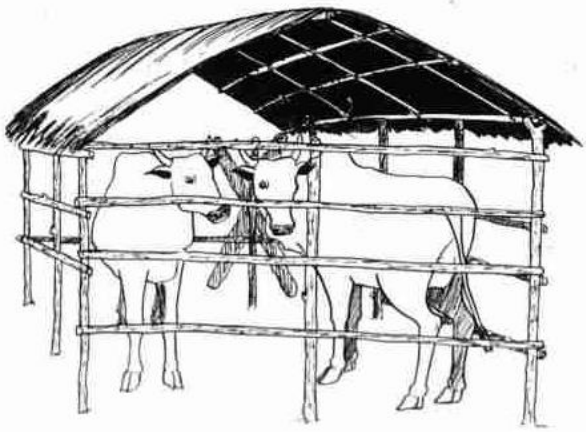
Major elements of agricultural environment	Importance
Soil	• Holds crop plants • Source of nutrients, water and air for crop plants • Used for making animal houses and storage rooms for farm produce
Water	• Used by crop plants to make their own food (photosynthesis) • Dissolves nutrients in the soil to be used by crop plants • Cools the crop plants and farm animals • Used for drinking by farm animals • Cools the soil where plants grow
Plants	• Conserve water for crops and farm animals • Protect the soil from losing nutrients • Rot and form manure for the growth of other plants • Source of feed to farm animals • Used for making animal houses
Animals	• Provide manure for plant growth • Control pests in crop fields by eating them • Used for making holes in the soil, allowing air to go in • Source of food for other animals
Sunlight	• Used by crop plants to make their own food • Makes farm animals such as chickens to produce eggs • Dries farm produce
Wind	• Cooling plants and animals • Drying agricultural products • Removing light useless matter in farm produce • pollination

Illustrations showing the importance of some elements of the agricultural environment

a: a goat drinking water from a river



b: a pole and thatch cattle house

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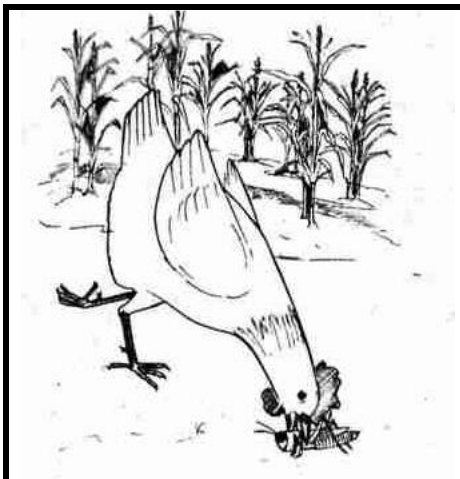
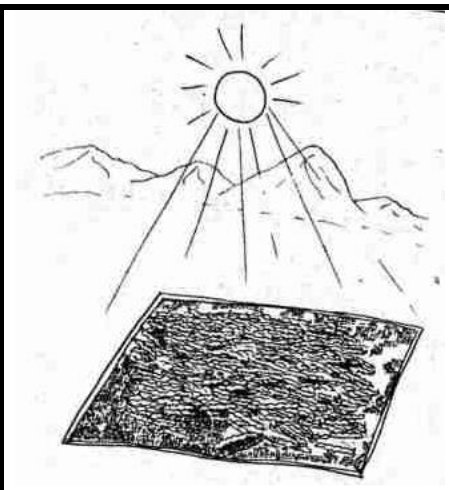


c: a chicken catching a grasshopper



d: beans being dried on a mat

e: winnowing maize

Unit 7 Harmful effects of the major elements of the agricultural environment

Element of agricultural environment	Unfavourable conditions	Harmful effects on crops and farm animals
Soil	• low nutrient content • hard soil	• leads to poor plant growth, fruiting and seed formation • results in poor root growth, poor entry of water ins oil resulting into drying of wells
Water	• too much water in the soil • too little water in soil • fast moving water	• results in poor root growth and a lack of air in the soil • leads to wilting of plants and a lack of water for farm animals to drink • carries away fertile top soil, crops and farm animals
Plants	• poisonous plants • parasitic plants	• kill farm animals • slow the growth of other plants
Animals	• stray farm animals	• destroy crops

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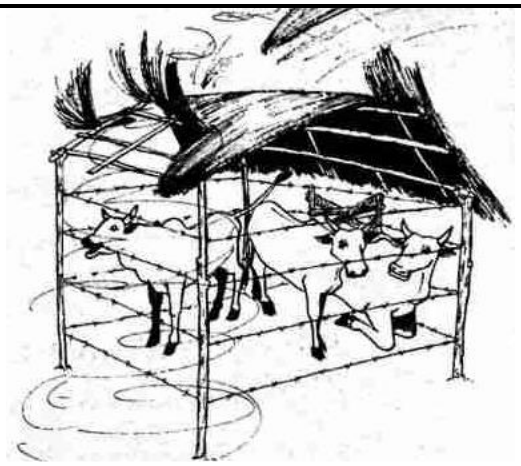
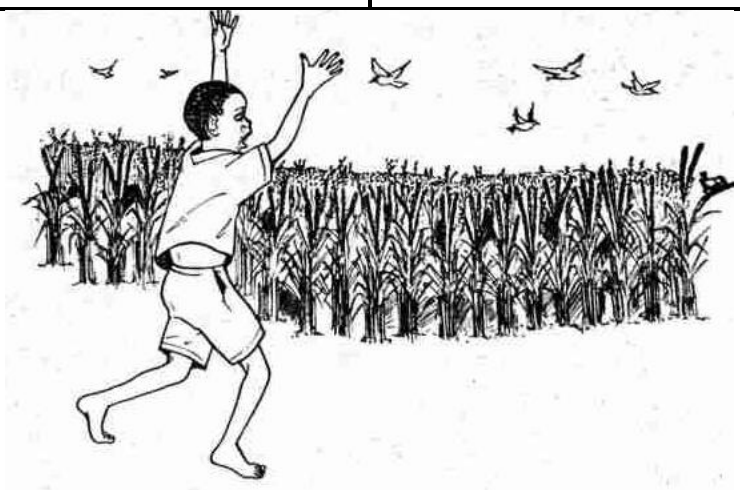
	• parasitic animals (worms) • pests (birds, army worms) • vectors	• transmit diseases • cause farm animals to be weak, grow slowly, die
Sunlight	• too much sunshine	• burns seedlings
Wind	• strong wind • destroys farm buildings	• fells crops

Illustrations showing harmful effects of some elements of the agricultural environment

a: running water is sweeping a maize crop away



b: whirl wind is blowing off the roof of a cattle house



c: a boy is chasing birds that are feeding from a rice field

Unit 8 Management of the major elements of the agricultural environment

Element of agricultural environment	**Ways of managing them**
Soil	• apply fertilizers • grow legumes • till the land • apply manure

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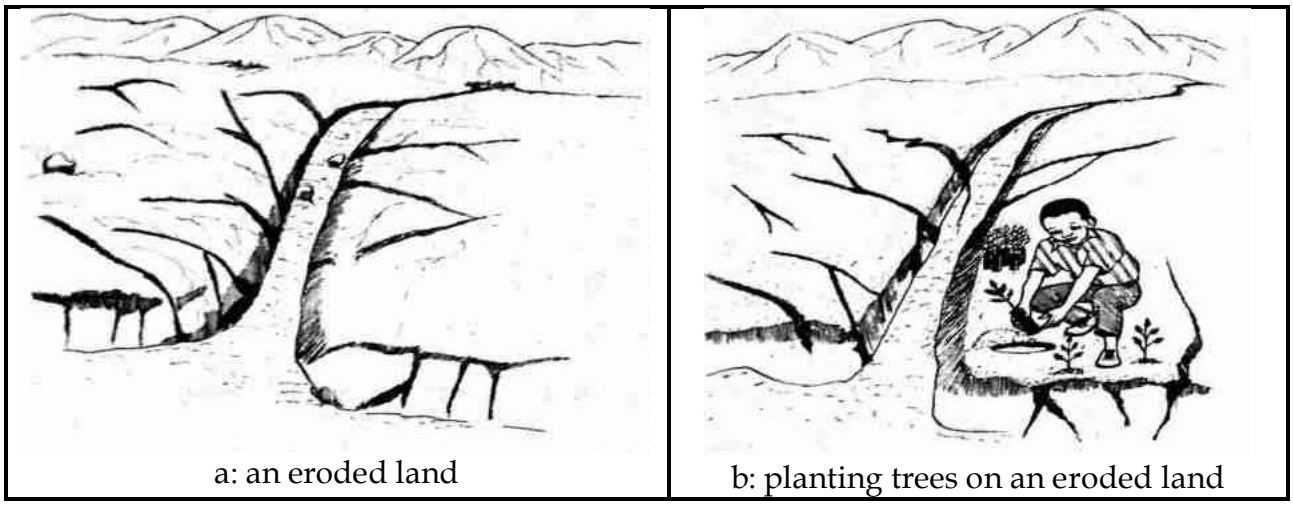
	• plant crops which need little nutrients
Water	• dig drains • irrigate crops • mulch the crops • make box ridges • plant crops that need a lot of water
Plants	• weed the garden • remove the diseased plants • spray chemicals
Animals	• destroy parasites and pests
Sunlight	• mulch plants
Wind	• plant trees as windbreak • make brick or grass fence

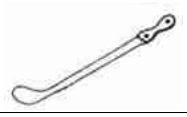
Illustration showing ways of managing the elements of the agricultural environment



a: an eroded land

b: planting trees on an eroded land

Unit 9 Common farm tools

Farm tools		**Uses**
a hoe		• digging the soil • making ridges • tilling • weeding
an axe		• cutting down trees • chopping wood
a slasher		• clearing land • weeding in woodlots

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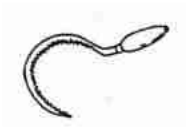
a sickle		• harvesting rice • cutting grass
a watering can		• watering crops • sowing young seeds
a rake		• collecting trash • levelling seed beds
a hand trowel		• lifting seedlings
a hand fork		• loosening soil in the garden
a panga knife		• cutting maize stalks • clearing bushes

Illustrations showing uses of some common farm tools

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a: cutting a tree using an axe

b: harvesting rice using a sickle

c: slashing grass using a slasher

d: watering vegetables using a watering can

e: levelling a nursery bed using a rake

f: lifting seedlings from a seed bed using a hand trowel

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g: making ridges using a hoe

h: loosening soil in a vegetable garden using a hand fork

Unit 10 Safe ways of using farm tools

Safe ways of handling farm tools

- ensure that blades point away from the body
- ensure that blades are properly fixed to their handles
- all tools with sharp blades should be hanged on the wall to avoid injury

illustrations showing safe ways of handling some farm tools

a: a proper way of carrying an axe

b: a proper way of carrying a hoe

safe ways of using farm tools

- ensure farm tools are firmly fixed to their handles
- be sure that farm tools are in good conditions
- be sure that farm tools are used for the intended purpose
- make sure there is enough space between people working

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Unit 11 Maintenance of farm tools

Maintaining farm tools means putting the farm tools in good conditions for use.

Illustrations showing bad conditions of some farm tools

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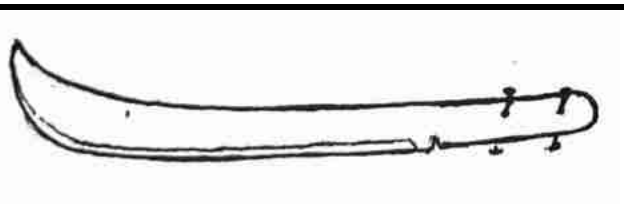
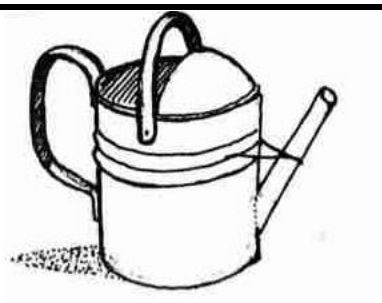
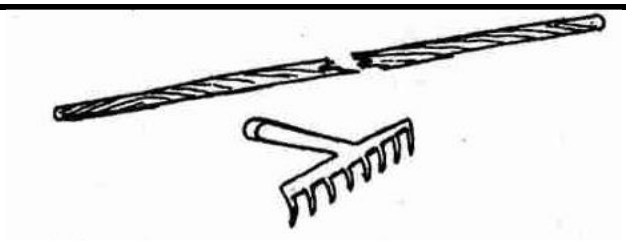
<td> 
a panga knife without a wooden handle</td>
<td> 
a watering can without a rose</td>
</tr>
<tr>
<td> 
the broken wooden handle of a rake</td>
<td> 
a hand fork with a broken spike</td>
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</table>

Farm tool	Ways of maintaining farm tools
Hoe, axe, slasher, panga, sickle	• sharpening • replacing broken handle • removing soil off the blade • oiling the blade • putting it in dry place
Rake, hand fork, hand trowel	• removing soil • replacing broken handles • oiling • putting in fry place
Watering can	• mending any holes or broken parts • painting inside • cleaning

Unit 12 Crops grown in Malawi

Types of crops grown in Malawi

There are two main types namely:

a. food crops
   - Food crops are crops grown mainly for food.

b. cash crops
   - Cash crops are crops grown mainly for sale.

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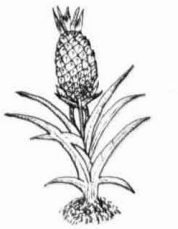
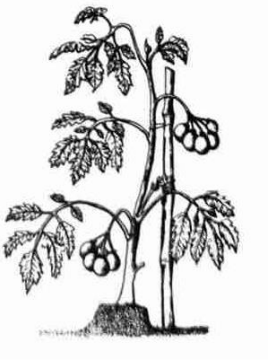
Food crops	Cash crops
maize	tobacco
millet	coffee
sorghum	sunflower
cassava	cotton
rice	tea
beans	sugar cane
peas	water melon
potatoes	tangerines
tomatoes	oranges
cabbage	macadamia
pawpaws	
mangoes	
cucumbers	
groundnuts	


sunflower


banana


pineapple


tomatoes


tobacco


cotton

Crops grown in specific areas in Malawi

Crop	Growing areas
Maize, groundnuts, mangoes, pawpaws, sweetpotatoes	All districts
Tobacco	Kasungu, mchinji, Lilongwe, dowa, ntchisi, rumphi, machinga, mzimba and mangochi
Cotton	Karonga, salima, nsanje, chikwawa, mwanza, mangochi and balaka
Millet and sorghum	Chikwawa, nsanje, karonga, mzimba and chitipa
Sugar cane	Chikwawa, nkhotakota and salima
Beans	Dedza, ntcheu and nkhotakota
Tomatoes	Dedza, ntcheu and salima
Cassava	Nkhotakota, karonga, salima, zomba, dedza, Kasungu, rumphi and nkhatabay
Cabbage	Ntcheu, dedza, thyolo and mzimba
Bananas	Thyolo, Mulanje, nkhatabay, karonga and chitipa
Pineapples	Mulanje, thyolo, nkhatabay , karonga and rumphi
Oranges	Mwanza, thyolo and neno

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Unit 13 Importance of crops

- ✓ Source of income
- ✓ Source of employment
- ✓ Source of raw materials
- ✓ Source of foreign exchange
- ✓ Source of food
- ✓ Source of animal feed

Raw materials	Industry	Products
Sugar cane	Sugar industry	Sugar, molasses
Soya beans	Hatchery and food industries	Poultry feed
Groundnuts	Oil processing industries	Cooking oil and margarine
Tobacco	Tobacco processing industries	Cigarettes
Cotton	Clothing manufacturing industry	Clothes
Maize	Milling companies	Mazie flour, breakfast cereal
Millet	breweries	Opaque beer, breakfast cereal

Unit 14 Crop husbandry practices

Crop husbandry practices are the activities that are carried out when growing crops.

Crop husbandry practices

- land preparation
- planting
- weeding
- fertilizer application
- pest and disease control
- harvesting
- storage

Crop husbandry practices and their related activities

Crop husbandry practice	Related activity
land preparation	• clearing • tilling • ridging • stumping • making seed beds
planting	• sowing seeds • transplanting seedlings • supplying

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weeding	• removing unwanted plants through burying • slashing and uprooting
fertilizer application	• application of manure and inorganic fertilizer
pest and disease control	• protecting the crop from harmful living things
harvesting	• gathering of crops after maturity
storage	• keeping harvested crops safely for future use

Unit 15 Land preparation and planting in maize

Land preparation activities

- site selection
- marking ridge spacing
- land clearing
- ridging
- marking planting stations
- manure application

Land preparation activity	Description of the activity
Site selection	Select fertile land
Marking ridge spacing	Mark ridges at 75 cm apart for sasakawa, 90 cm apart for other methods of planting using string and pegs
Land clearing	Cover lightly organic matter along marked lines using a hoe
Ridging	Make ridges 20 cm high by covering the organic matter properly
Marking planting stations	Mark planting stations at 25 cm apart for sasakawa or 75 cm apart for planting three seeds per station using a planting frame or a small hoe
Manure application	Apply a double handful well decayed manure per planting station

Land preparation

Reasons for preparing land for maize early

- Is easier to work when the soil is still moist
- Leads to early planting
- Give s enough time for buried plant residues to rot

Maize varieties

Maize varieties recommended in Malawi

Seed selection

Characteristics of good seeds for planting

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- Large in size
- Whole
- Not shrivelled
- Free from pest and disease attack

Plant spacing

Plant spacing	Number of plants per station
90 cm	3
75 cm	3
60 cm	2
50 cm	2
40 cm	1
30 cm	1
25 cm	1

Planting maize

Activities involved when planting maize

- Marking out planting stations at a recommended spacing
- Planting the correct number of seeds per station
- Covering the planting hole at 7-10 cm deep

Reasons for planting maize early

- Makes full use of soil nutrients before they are leached
- Use most of the rains in the growing season
- Matures fast before the pests and diseases become serious

Unit 16 Weeding and fertilizer application

Weeding is the removal of unwanted plants in a garden.

Importance of weeding

- Reduces competition between crops and weeds for food, sunlight, air, water and space
- Reduces pests and diseases in the garden

Common weeds in Malawi

- The black jack (chisoso)
- The Bengal commelina/ wandering jew (khovani)
- Amaranthus (bononGwe)
- Stargrass (kapinga)
- Witch weed (kaufiti)
- Msonthi

Methods of weeding/weeding methods

- ✓ Uprooting
- ✓ Light hoeing
- ✓ Banking

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✓ Applying herbicides

Fertilizer application

Timing	Fertilizer	Rates per station (at 25 cm apart and 1 seed per station)
At planting	23:21:0 + 4s	1 coke bottle top without a liner inside
4 weeks after	Urea	1 coke bottle top with a liner inside
Emergence	CAN	1 coke bottle top without a liner inside

Unit 17 Pest and disease control in maize crop

Pests are living organisms which attack crop plants.

Common pests of maize, damages they cause and ways of controlling them

Pest	Damage caused	Control
Stalk borer	• Makes holes on leaves • Burrows into the stem of a fresh cob	• Apply dipterex (trichlorfon) into the funnel of maize plant • Spray endosulfan
Mazie weevil	• Drills holes into the grain	• Apply suitable antipest dust
Army worm	• Eat young plants	• Trap dig to the ground trenches arounf a garden • Spray cabaryl or sumithion or sumicidin
Red locust	• Eat leaves from the margin inwards	• Hand pick • Spraying cabaryl or sumithion or sumicidin
Large short honed grasshopper	• Eat leaves	• Hand pick • Spraying cabaryl or sumithion or sumicidin
Rodents (rats)	• Eat grain	• Use rat guard on granaries or traps • Place rat poison in the storage structure • Use cats

Illustrations showing some of the maize pests

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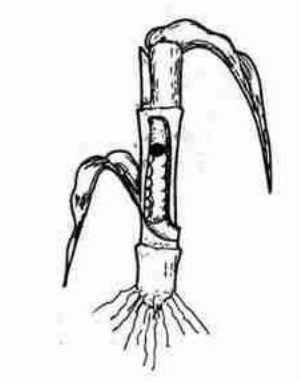
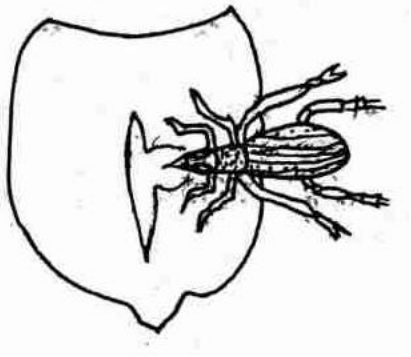
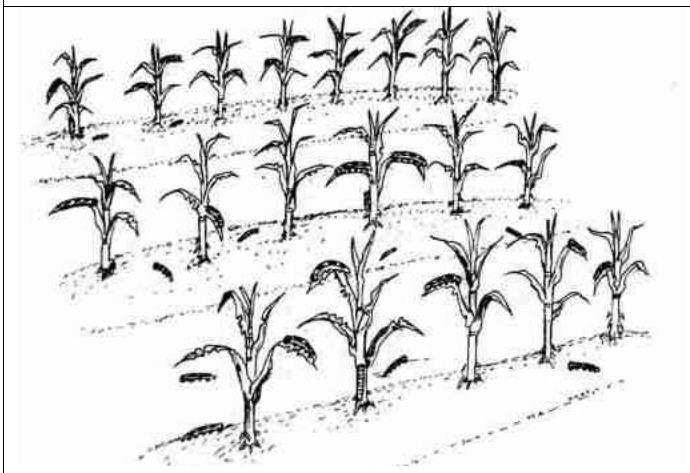


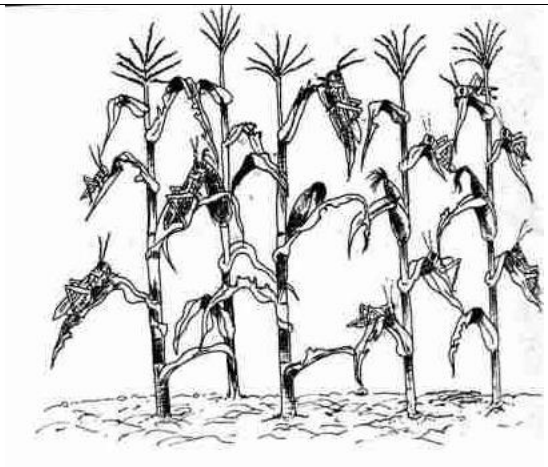
stalk borer



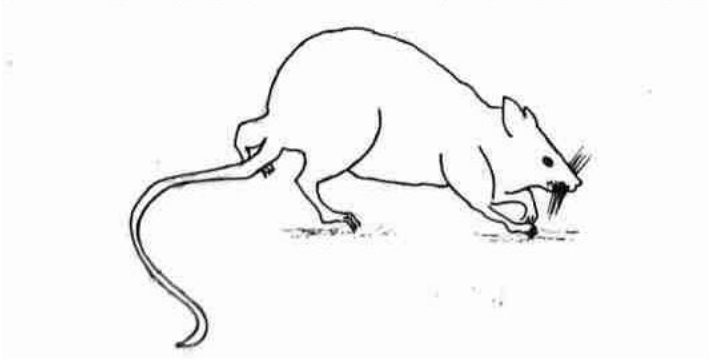
maize weevil



army worms



red locusts



a rat

Maize diseases

Common maize diseases, their symptoms and control

Disease	Symptoms	Control
Headsmut	Black powdery substance covering tassels and cobs	• Uprooting and burning infected parts
Maize streak virus	Loss of green colour along parallel veins on leaves	• Planting early • Using resistant varieties • Applying a pesticide e.g. gaucho

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Leaf blight	Long spots on leaves	• Growing resistant varieties

Illustration showing one of the maize diseases

headsmut

Unit 18 Harvesting and storage of maize

When should maize be harvested?

- Maize should be harvested as soon as it is fully dry.

Methods of harvesting maize

- Picking the cobs directly from standing stalks in the garden
- Picking cobs from stalks of maize in a stook

A stook is a standing heap of cut maize stalks.

Stooking is putting plants on a heap for harvesting.

Importance of stooking

- It facilitates complete drying of the crop
- It simplifies harvesting
- Enables the farmer to plough the cleared area while the soil is still moist

Illustrations showing methods of harvesting maize

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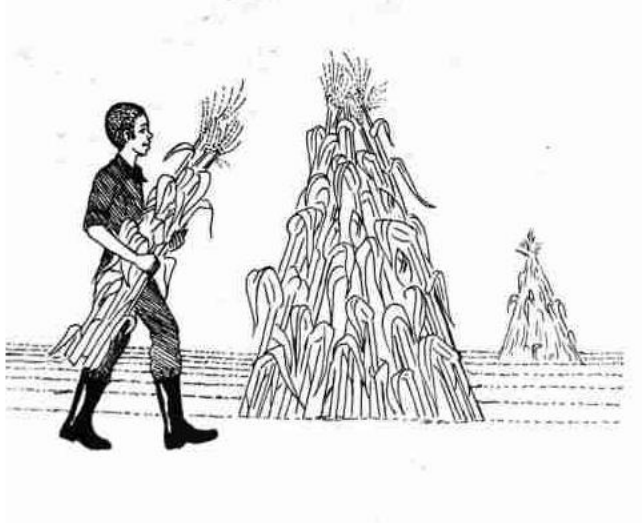
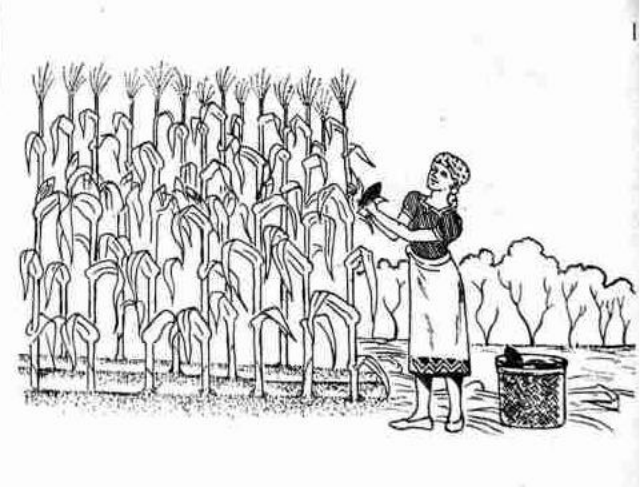


stooking



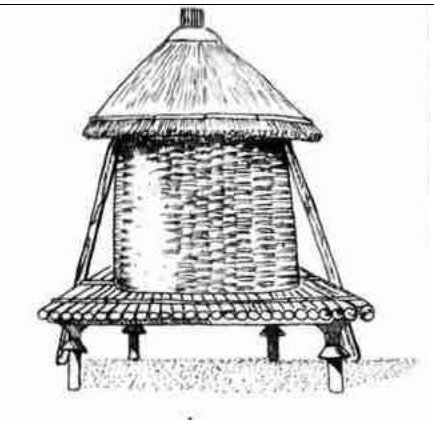
direct stripping

Maize storage

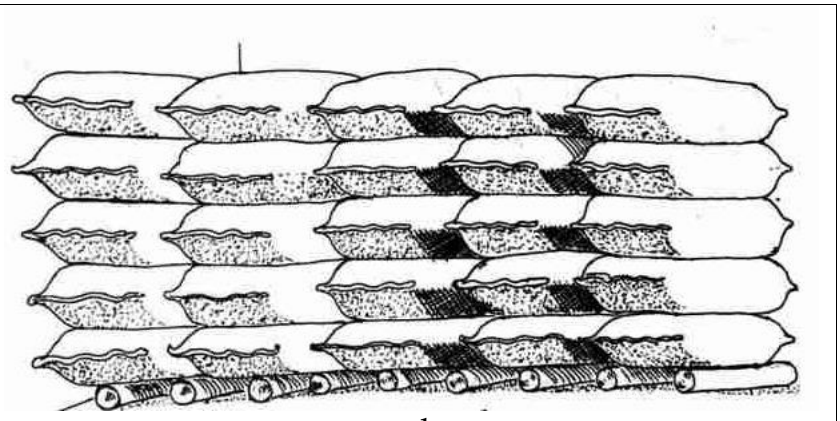
Maize storage facilities

- Granaries
- Sacks

Illustrations showing ways of storing maize



Maize granary



sacks

Unit 19 Farm animals raised in Malawi

Common farm animals raised in Malawi

cattle	**goats**	**ducks**	**guinea fowl**	**pigeons**	**fish**
sheep	pigs	chickens	turkeys	bees	rabbits

characteristics/features of farm animals

- body size
- number of legs
- shape and size of eyes
- colour of fur or feathers
- skin cover
- presence or absence of scales, beards, fins or horns

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Unit 20 Importance of farm animals

- source of food
- source of manure
- source of income
- source of raw materials
- source of power
- source of employment
- cultural reason
- social reason (prestige)

Unit 21 Animal husbandry practices

Animal husbandry practices are activities of caring for farm animals.

There are four main animal husbandry practices namely:

- housing
- feeding
- breeding
- parasite and disease control

Unit 22 Housing and feeding farm animals

Types of different animal houses depending on the type of animal kept

Farm animal	Type of animal house
Cattle	▪ Pole and thatch cattle house ▪ Barbed wire cattle house ▪ Brick cattle house
Goat	▪ Raised goat house ▪ Unraised goat house
Sheep	▪ Raised sheep house ▪ Unraised sheep house
Pigs	▪ Pig house
Chicken	▪ Deep litter chicken house ▪ Battery cage chicken house ▪ Traditional chicken house
Ducks	▪ Duck house
Rabbits	▪ Deep litter rabbit house ▪ Traditional raised house ▪ Wire cage rabbit house

Illustrations showing some types of animal houses

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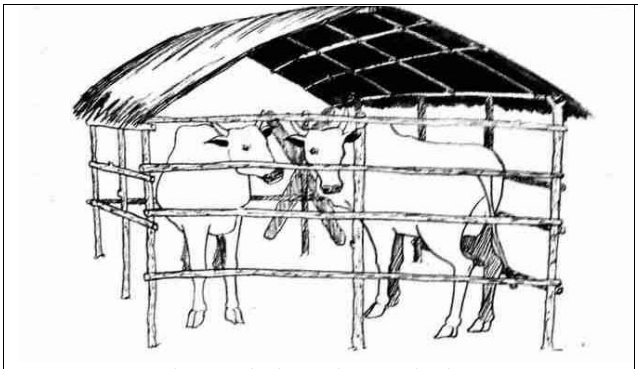
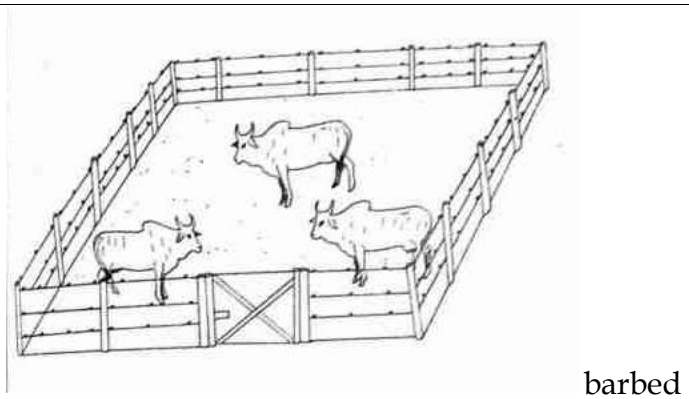
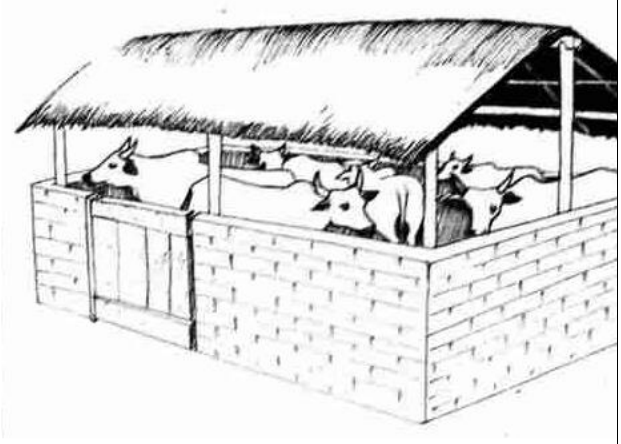


a pole and thatch cattle house



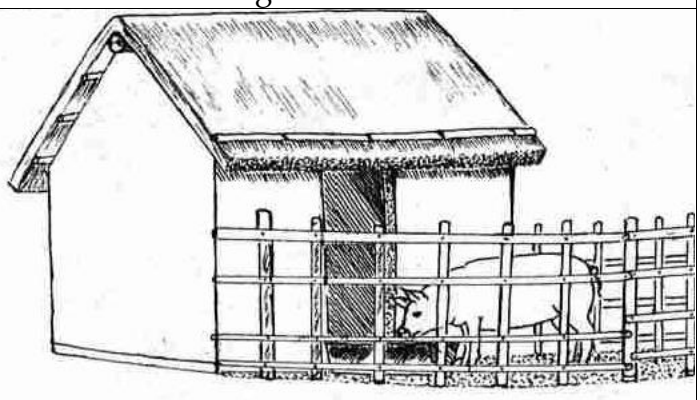
barbed wire cattle house



brick cattle house

raised goat house

unraised goat house



a pig house

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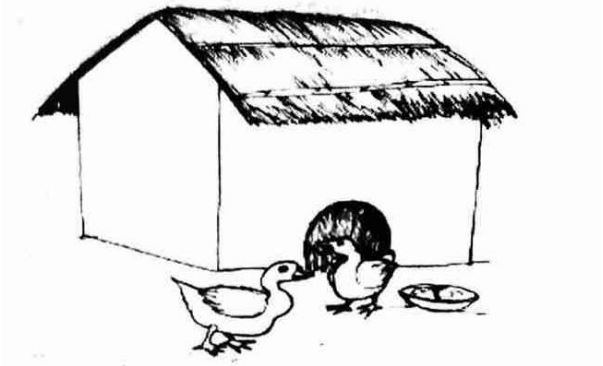
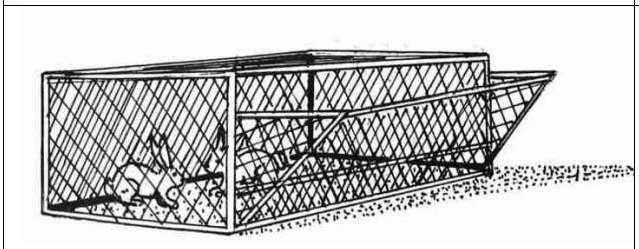
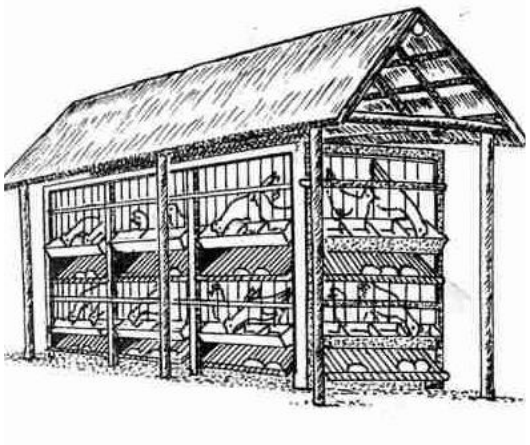


duck house

traditional chicken house



wire cage rabbit house



battery cage chicken house

Characteristics of animal houses

- Strong walls
- Roomy, well-lit and well ventilated
- Well drained and easy to clean
- Well thatched
- Solid floor
- Warm in winter and cool in summer

Importance of housing farm animals

- Animals are protected from diseases, parasites and predators
- They are protected from bad weather
- It provides easy control of animals
- It is easy to collect animal products e.g. eggs, milk and manure

Feed refers to food for animals.

Importance of feeding farm animals properly

- Maintenance of life such as walking and breathing
- Production of meat, milk, eggs and power
- Protecting the animal from diseases

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Unit 23 Disease and parasite control and breeding of farm animals

Common animal diseases

- ✓ Tuberculosis (TB)
- ✓ New castle
- ✓ Coccidiosis
- ✓ Fowl cholera
- ✓ Fowl pox
- ✓ East coast fever
- ✓ Foot and mouth disease

Effects of diseases on farm animals

- Loss of production
- Loss of animals
- Transmission of diseases to human beings

Methods of controlling animal diseases

- Quarantine
- Disinfection
- Use of resistant breeds
- Control of vectors
- Vaccination

Common parasites which attack farm animals

- Liver fluke
- Round worm
- Tapeworms
- Hookworms
- Ticks
- Tsetse flies

Effects of parasites on animal production

- Loss of income to the farmer
- Cause discomfort to animals
- Transmit disease
- Suck food nutrients from host animal

Methods of controlling parasites

- ❖ Spraying
- ❖ Killing parasites by hand
- ❖ Dipping
- ❖ Drenching

Illustrations showing methods of controlling parasites and diseases in farm animals

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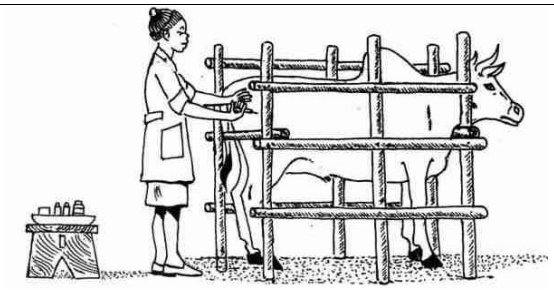
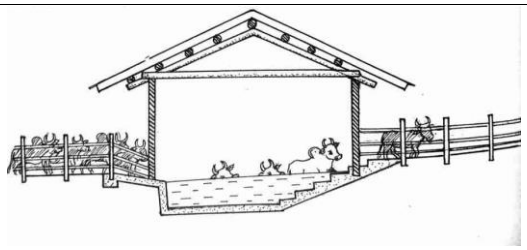


vaccinating a bull



cattle dipping

disinfecting a chicken house

drenching a cow

Breeding farm animals

Breeding is increasing the number of animals or improving their characteristics.

Activities involved in breeding

- Selecting animals with good characteristics to be parents

Breed is a group of animals of the same type which have similar characteristics.

Characteristics of local breeds of farm animals

- ❖ Withstand unfavourable conditions
- ❖ Resist parasites and diseases attack
- ❖ Ability to walk long distances
- ❖ Small in size
- ❖ Give low production
- ❖ Grow slowly

Characteristics of improved breeds

- ❖ Give high production
- ❖ Grow big in size
- ❖ Grow fast
- ❖ Low resistance to parasites and diseases
- ❖ Get tired easily

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Importance of improving the local breeds

- The improved breed produces more than the local breed
- The improved breed is large in size than the local breed
- The improved breed grows faster than the local breed

Unit 24 Trees grown in Malawi

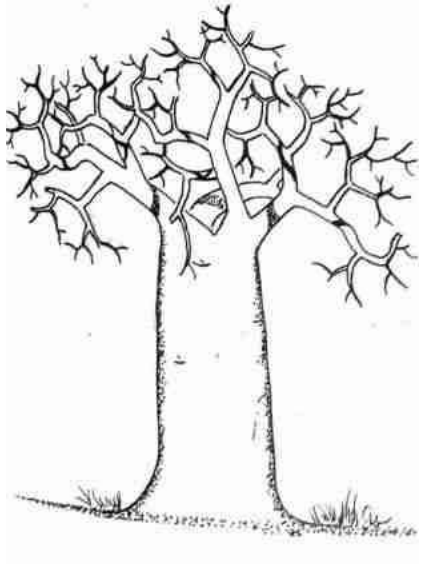
Trees grown in Malawi are grouped into two namely:

a. Indigenous trees
b. Exotic trees

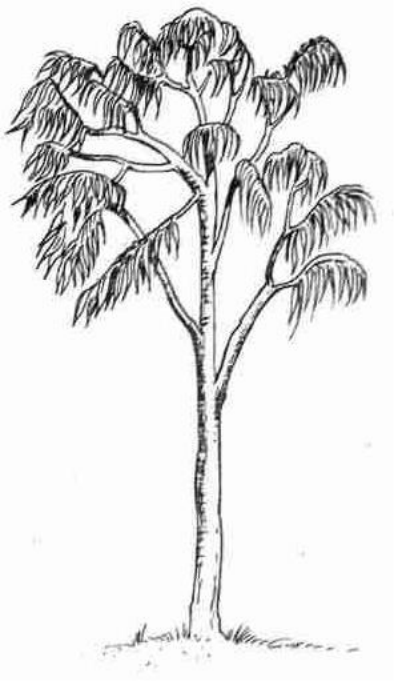
Indigenous trees are trees that originally grow in Malawi.

Exotic trees are trees that are brought into Malawi from other distant countries.

Illustrations showing some trees grown in Malawi



a: the baobab



b: the bluegum

c: the palm tree

Examples of indigenous trees and exotic trees

Indigenous trees	Exotic trees
Msangu	Blue gum
Baobab	Pine
Mtondo	Gmelina
Muwanga	Neem
Chitimbe	India
Tsanya	Jacaranda
Mlomwa	Cindirella
Msambamfumu	Leucaena
Thundu	
Mkuyu	

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Characteristics of indigenous trees

- Hard and tough
- Withstand drought
- Resist pest and disease attack
- Grow well with little care
- Grow slowly

Characteristics of exotic trees

- Soft
- Cannot withstand drought
- Easily attacked by pest and diseases
- Demand more care
- Grow fast

Ways of improving indigenous trees

- Raising seedlings properly
- Applying manure
- Weeding
- Pruning
- Transplanting the seedlings at the appropriate spacing
- Constructing firebreaks around them

Unit 25 Importance of trees grown in Malawi

- Provide shelter
- Provide medicine/medicinal value
- Conserve soil
- Conserve water
- Brings rainfall
- Provide oxygen for fauna
- Source of food e.g. honey and fruits
- Habitat for wild animals
- Tourist attraction
- Source of firewood
- Source of timber
- Improve soil fertility

Unit 26 Types of forests

Forest is a large area of land covered with trees and grasses.

There are two main types of forests namely:

a. Natural forest is a forest made up of trees growing on their own.
b. Planted forest is a forest made up of planted trees.

Examples of natural forests

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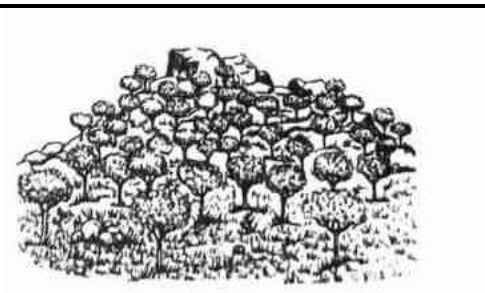
- Karwe in Nkhatabay
- Chimaliro in Kasungu
- Perekezi in Mzimba
- Khurubvi in Nsanje
- Michiru in Blantyre

Examples of planted forests

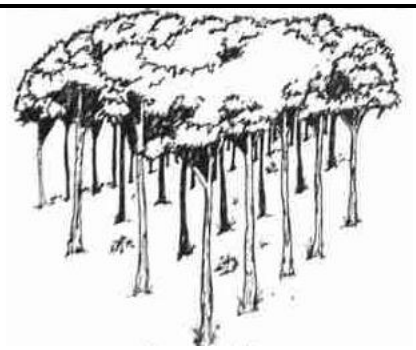
- Chikangawa in Mzimba
- Chongoni in Dedza
- Dedza mountain
- Zomba mountain

Characteristics of natural forest and planted forest

Natural forest	**Planted forest**
different types of trees grown	one type of tree is grown
trees grow own their own for different purposes	trees are grown for a specific purpose
trees are not cared for	trees are cared for
trees grow without uniformity	trees grow uniformly
trees are scattered without a pattern	trees are properly spaced and forming a pattern



a: a natural forest



b: a planted forest

References

Malawi Institute of Education(2007). *Agriculture teacher's guide for standard 5*. Domasi: MIE, pages 1-109.

Malawi Institute of Education(2007). *Agriculture learners' book for standard 5*. Domasi: MIE, pages 1-89.

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