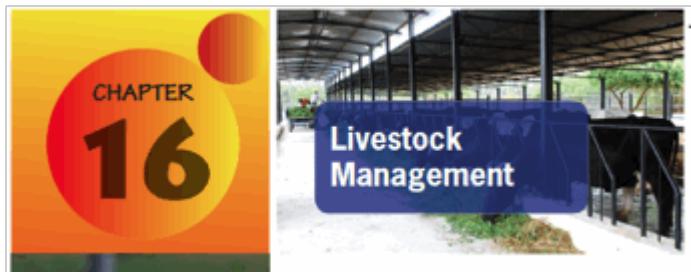


CHAPTER 16



OBJECTIVES

At the end of this chapter, students should be able to:

- â—† state the meaning of livestock management.
- â—† state the requirement for good livestock management.
- â—† explain the importance of these management practices to livestock.
- â—† keep farm animals and take care of them (at least one ruminant and one non ruminant)

16.1 Introduction

Farm animal management requires a good knowledge of housing, feeding and hygiene that will ensure the safety of the animals. It also requires careful planning and administrative capability in order to be able to effectively carry out necessary routine operations.

Farm animals can be sensitive to environmental stress and improper handling. Therefore, a farmer requires a knowledge of best practice that will enhance better livestock management

16.2 Meaning of Livestock Management

Livestock management refers to the activities carried out by a farmer and his ability to tend and care for farm animals which starts from day old to the point of marketing or disposing the farm animals. It includes routine programme of provision and maintenance of adequate housing, good feeding, sanitation and Medicare.

16.3 Requirement for Good Livestock Management

This requires the provision of good infrastructure, feeding, sanitation and health care that will make livestock to thrive well. Each type of farm animal requires specific care and management programme as follows:

16.3.1 Cattle management

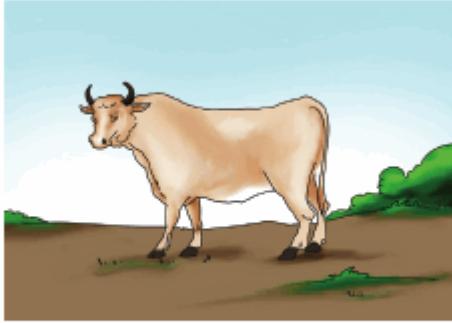


FIGURE 16.1 Cattle

16.3.1.1 Breeds

There are three major classes of cattle based on the role they perform:

1. Dairy

- (i) White fulani
- (ii) Jersey
- (iii) Red poll
- (iv) Kerry
- (v) Dairy short horn
- (vi) South devon
- (vii) Friesian
- (viii) Dexter

2. Beef cattle

- (i) Kuri
- (ii) Nâ€™Dama
- (iii) Red bororo
- (iv) Sokoto gudali
- (v) Keteku
- (vi) Rahazi
- (vii) Brown swiss

3. Dual-purpose cattle

- (i) Biu
- (ii) Muturu
- (iii) Azawal
- (iv) Wadara/Shuwa

Cattle can be managed in three ways as follows:

- (1) Intensive system
- (2) Semi-intensive system
- (3) Extensive system

16.3.1.2 Intensive system of cattle management

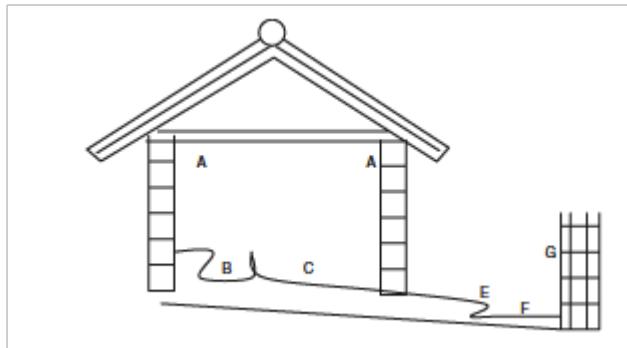
This is the practice whereby cattle herds are kept in confinement for most time. The confinement can be two different types of housing namely:

- (a) Conventional barn
- (b) Loose house

(a) Conventional Barn: These are otherwise called stanchion barns. It is where cattle herds are confined together in a platform and secured by the neck with stanchions or neck chains.

(b) Loose house: This is a house or shelter provided for herds of cattle that are kept loose in an

open pasture or paddocks. The animals return to this shelter when the weather is hot or cold or during the rainy season.



A. Roof supporting structure

B. Manager

C. Covered area

D. Roof

E. Gutter

F. Open area

G. Compound wall

16.3.2 Space requirement and management

16.3.2.1 Each cattle should have an adequate space

A. Bulls within house 16.7 m^2

Outside house $33.5 \text{ } \hat{\text{A}} \text{ } 37.2 \text{ m}^2$

B. Milking cows $1.03 \text{ } \hat{\text{A}} \text{ } 1.52 \text{ m}^2$

C. Calves individual pens $1.83 \text{ } \tilde{\text{A}} \text{ } - 1.22 \text{ m}^2$, 3 months and above 2.8 m^2

â The floor should be concrete with rough surface to avoid slippery. The upright should be constructed with hard wood or galvanised pipes.

â The roof should be made of corrugated iron sheets or asbestos. Fence and shade should be provided. Wire fences are ideal.

â Ensure enough ventilation in all the barns.

16.3.2.2 Semi-intensive system

This is a system of cattle management whereby a form of housing unit is provided as shelter but the cattle herds are allowed to graze freely and retire to the house later.

16.3.2.3 Extensive system of management

This is a system of cattle management whereby the animals are left to fend for themselves.

It has the following features:

â The animals are exposed to weather hazards.

â There is no control over the pasture consumed by the animals.

â There is no Medicare for the animals.

â The animals can be stolen or killed by wild animals.

â They are exposed to diseases and pests.

â They may stray into people's farm and destroy planted crops.

16.3.2.4 Feeding

Good and adequate feeding is an important aspect of livestock management. The feeding requirement of cattle varies with age and purpose of production. Cattle are fed with two major types of food.

- (a) Roughages
- (b) Concentrates

Roughages: These are feed with high fibre content and low indigestible protein. Examples are pasture, grasses and legumes hay, silage, soilage, straws and remains of harvested crops.

Concentrates: These are feed that contain low fibre content but are very rich in either digestible protein or carbohydrates. The two types of concentrates are protein concentrates and carbohydrate concentrates. Calves are fed on milk and milk substitutes and after weaning they are allowed to graze with the dam. Adequate clean water should be provided.

16.3.2.5 Farm sanitation (hygiene)

- â The pens and shed should be cleaned using appropriate disinfectant.
- â Feeding trough and water trough should be cleaned daily.

16.4.1 Breeds of sheep

1. Ouda/Uda
2. Merino
3. Yankassa
4. Balami
5. Dorset horn
6. Lohi
7. Nellore
8. West African dwarf sheep

16.4.2 Housing

Sheep are managed like other ruminants. Sheep does not require elaborate building except for those raised for milk production. Building for sheep should be constructed on dry and cool place. It should have enough ventilation. The roof should be at least 2.14 m high in front sloping to (1.53 m) behind, for the lintel type of stable, but with a ridge roof the minimum height should be 3.2 m at the ridge and 2.14 m at the eaves. The floor should be concrete. Where it is not possible adequate litter materials should be used. Large sheep require 0.7459 m^2 space and small ones 0.56m^2 . The house should have space for water receptacle at least 0.31 m above ground level and fodder racks high enough to allow the sheep to pull the feed down as they would like browsing. The sheep can be housed based on their types – general flock shed, ram shed, lambing shed, sick animal shed and shearing room.

16.4.3 Feeding

Sheep are fed with roughages and concentrates. Their diet should be supplemented with cultivated fodders and grains. Sheep usually prefer some types of grasses and legumes. Extensive grazing on marginal grassland is practised. At times, sheep are fed with chopped cassava tubers, plantain peels and some herbage. Clean water should be provided at regular intervals. The young sheep should be fed more of protein.

16.4.4 Sanitation (hygiene)

The farm animals should be provided with adequate medical care. This can be in the form of vaccination and other preventive drugs. They should be dewormed and dusted at regular intervals. Feeding trough should be cleaned regularly while the water trough should be washed on daily basis. The surroundings should be kept clean and bushes and grasses around the premises cut down.

16.4.5 Terminologies used for sheep

Ram – adult male

Ewe – adult female

Lamb – young of male or female sheep

Lambing – system of delivery

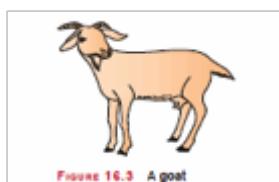
Tupping – system of mating

Suckling – female with offspring

Flock – a group of sheep

Mutton – meat of sheep

16.5 Goat



16.5.1 Breeds of goat

1. Sokoto red – produces finest leather (Morocco leather)
2. Bornu red
3. Kano brown
4. Bauchi
5. Anglo – Nubian
6. Sahel/Fulani
7. Maradi
8. West African dwarf goat

Goats are very hardy animals and can survive any harsh environmental condition such as rainfall and sunshine. Goats are reared under the three management systems (intensive, semi-intensive and extensive systems).

16.5.2 Housing

â Goat houses are normally built using corrugated iron sheet, asbestos, and thatch materials. The floor is made of concrete. Where it is not available, floor can be made with litter materials. The walls should be low so as to allow animals jump over it. In goat farms different sheds are raised.

â **Shed for billy:** The bucks are housed in these sheds. They are fitted with required accessories.

â **Kidding shed:** These are like maternity pens. Pregnant doe are housed individually here.

Warming devices like heater are provided to protect the newborn kids.

â **Kids shed:** Kids are housed here at the rate of 75 animals per shed. Partitions are made for the unweaned and weaned but immature ones are separated and allowed to mature.

â **Sick animal shed:** A shed of 3 Å— 2 Å— 3 m size is constructed where sick animals are treated

until they are healthy. Other facilities like milking stall and adequate spacing of about 1–2 m should be provided to enable the animals walk and play around. Hay and silage racks should be provided. Goats can also be raised comfortably by tethering, by tying the goat to a tree or stand. The goats are untied in the evening and allowed a little space in the compound for the night.

16.5.3 Feeding

Goats feed on roughages and concentrates. At times they are fed on yam peels, cassava tubers/peels, groundnut, maize and guinea corn. Goat browses on a variety of plant resources such as herbs, shrubs and trees or their parts. They are fed with hay, and silage supplements are also given in the form of concentrates such as blood meal, groundnut cake and fish meal. In addition, vitamins and minerals are also provided.

16.5.4 Hygiene

â Goat houses should be properly cleaned, washed and disinfected. The bedding materials, faeces and urine should be removed at intervals. The animals should be occasionally dewormed and dusted.

â Feeding trough should be cleaned regularly while the water trough should be washed on a daily basis. The animals should be regularly vaccinated against diseases such as rinderpest, brucellosis, anthrax and foot and mouth diseases.

â Sick animals should be culled or isolated, while dead ones should be properly disposed off or burnt.

16.5.5 Terminologies used for goats

Buck (billy) – Adult male goat

Doe (Nanny) – Adult female goat

Kid – A young or baby goat

Tether – A castrated male goat

Kidding – Act of giving birth (parturition)

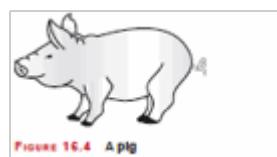
Chevon – Meat of goat

Servicing – Act of mating

Castrate – Castrated

16.6 Pig Management

Pigs, like cattle, are raised under intensive, semi-intensive and extensive management system. However, the details of the management system such as housing design and construction, feed and feeding and routine health management vary with each type of animal.



16.6.1 Breeds of pigs

1. Large black
2. Large white
3. Chester white

- 4.** Landrace
- 5.** Hampshire
- 6.** Berkshire
- 7.** Poland China
- 8.** Durock Jersey
- 9.** West African dwarf pig

16.6.2 Housing

The pens are divided into units depending on the functions they serve. For example:

- (a)** Farrowing pen: For delivery of litters by the pregnant sow.
- (b)** Litter pen: Where newly delivered litters are kept to prevent cannibalism by the dam.
- (c)** Mating pen: Where mating is done.
- (d)** Growers pen: Where piglets are kept.
- (e)** Sickbay/isolation pen: Where sick animals are kept and treated. The walls should be built with blocks and iron bars, since their snouts are used in pulling down objects. The roof should be made of iron sheets or asbestos. The floor should be made of concrete. The house and its gate should be made of strong iron and be well ventilated. Shade should be provided to protect them from sunshine. There should be room for beddings and rail guards in the pens.

16.6.3 Feeding

The pigs are monogastric and with simple stomach. They feed voraciously on concentrates, tubers crops like cocoyam, yam, cassava, maize, sorghum and household left over. Occasionally vegetables are supplied to provide vitamins and minerals. Different types of pigs are fed with different ration depending on type of production. For example, piglets are given creep feeding 2 weeks after farrowing.

16.6.4 Hygiene

- â Clean the pens regularly. Clean and change the water in the wallow on a daily basis.
- â Feeding and watering trough should be cleaned daily.
- â Bedding should be removed at intervals.
- â Deworm animals regularly against worms.
- â Give protection against ectoparasites and other pests by regular dipping and disinfecting pens and their surroundings using pesticides and carrying out routine.

16.6.5 Terminologies used for pigs

Boar – A mature male pig

Sow – A mature female pig

Gilt – A female pig that is matured to reproduce

Piglet – The young or baby pig

Barrow/hog – A castrated male pig

Farrowing – The act of parturition in pig

In Sow – Pregnant sow

Dry sow – Sow that is not pregnant

Pork – Meat of pig

Bacon – Salted pig meat

Lard – Pig meat with fat

Servicing – Mating in pig

Litter – Set of piglet farrowed at the same time.

Swine – A group of pigs.

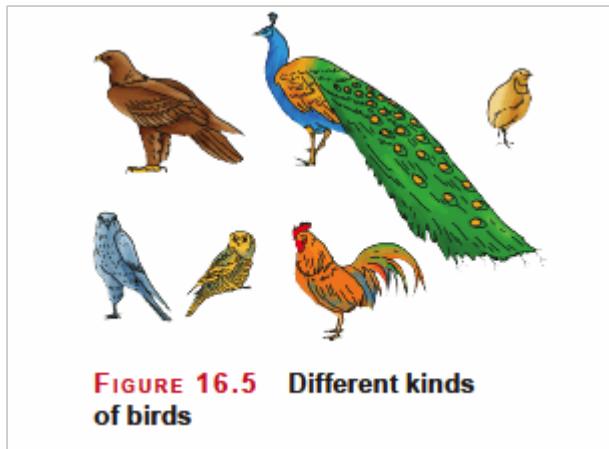


FIGURE 16.5 Different kinds of birds

16.7 Poultry Management

Breeds of poultry

Breeds	Purpose
White leghorn	Egg production
Brown leghorn	Egg production
Shika brown	Egg production
Playmouth rock	Dual purpose
Rhode Island red	Dual purpose
Harcos	Dual purpose
Light Sussex	Meat production
White Cornish	Meat production

Birds are kept under three major systems of management, namely:

- â Intensive system
- â Semi-intensive
- â Extensive system

16.7.1 Intensive system

This system allows for the confinement of birds with adequate housing, feeding and good hygiene.

The system is further divided into two namely:

- i. Battery cage system
- ii. Deep litter system



FIGURE 16.6 Battery cage system

16.7.1.1 Battery cage system

This is a system whereby birds are kept and cared for in cages. The cages are made of expanded metals built in a slanting form to allow egg to roll down. They are fitted with feeders and watering

troughs. Some cages are operated manually, while others are operated automatically using electricity. They also have fixtures that allow for proper disposals of faeces. The cages are of various sizes.

Advantages of Battery Cage System

- (a) It conserves labour.
- (b) Unproductive birds can be easily identified and culled.
- (c) Eggs are clean.
- (d) The birds and eggs are protected from pests and predators.
- (e) It makes room for accurate record keeping.
- (f) Birds conserve their energy due to confinement.
- (g) It reduces incidence of disease and pests.
- (h) There will be reduction of such vices like cabalism and pecking.
- (i) It is most ideal for egg production.

Disadvantages of Battery Cage System

- (a) It is costly to set up.
- (b) Fertile eggs cannot be produced.
- (c) Restricted movement can result in malnutrition.
- (d) Spread of disease may be fast since the birds are kept together.

16.7.1.2 Deep litter system

This system involves keeping of both male and female birds together. The birds are raised in a well ventilated house with the floor covered with wood shavings, dry grasses or straw. The roof of the house is covered with

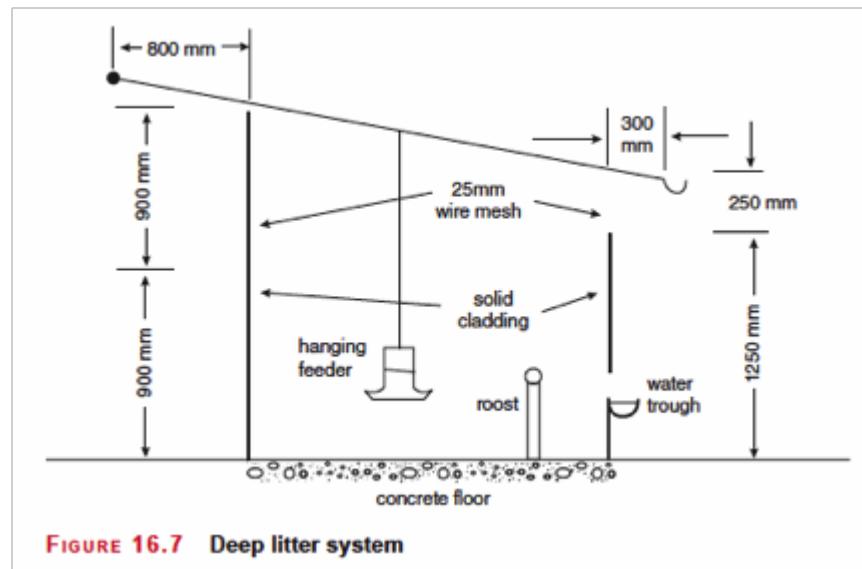


FIGURE 16.7 Deep litter system

iron sheet or asbestos. Birds are provided with feeders, watering trough and laying nest. There should be adequate ventilation and enough space to avoid overcrowding.

Advantages of Deep Litter System

- (a) Large number of birds can be managed under this system
- (b) It requires less capital than battery cage.
- (c) It maximises the use of land.
- (d) It is ideal for fertile egg production.
- (e) It maximises labour.
- (f) There will be loss of eggs due to thieves and predators.

Disadvantages of Deep Litter System

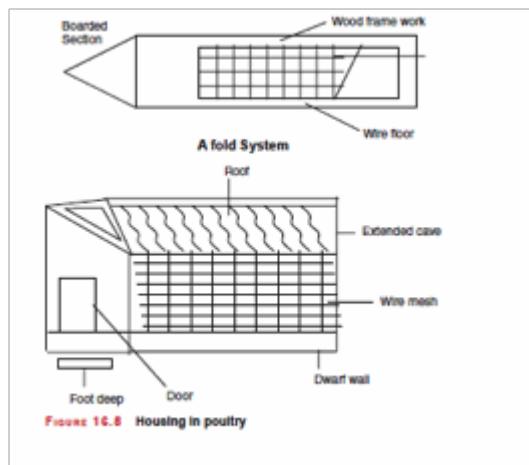
- (a) There are chances for waste of feeds.
- (b) Vices like cannibalism and pecking are rampant.
- (c) Spreading of disease and pests is easy.
- (d) Egg may be dirty due to stains from the litter.
- (e) It is difficult to identify and cull unproductive birds.

16.7.2 Housing

House should be located in a well-drained area, not prone to storms and flood. It should be accessible to the road for transporting materials. Poultry house should have east– west orientation.

16.7.2.1 Specified spacing for birds

0.023 m² for each 8-week-old birds
 0.031 m² for each 3-month-old birds
 0.047 m² for each 4-month-old birds
 0.058 m² for each 5-month-old birds
 0.067 m² for each pullet
 0.093 m² for each hen



Brooding pen: They are used for brooding chicks while rearing houses are used for rearing chicks.

Layer pen: They are provided for hens at the point of egg-laying. The pens are fitted with perches, nest boxes, water trough, dry mash, and dropping boards.

Battery cage housing: Hens are housed singly or in pairs and are confined in cages. The usual floor space is 38 Å— 46 cm for singles and 46 Å— 46 cm for doubles. The floor is made of stout galvanised wire slopes (10.2 cm) from behind to an egg cradler, extending some 15.2 cm to the front of the cage.

16.7.3 Feeding

Birds are monogastric animals with simple stomach. They are fed with different types of mash (feed). The type of mash given to birds depends on the age and purpose for which birds are kept. The different types of mash (feed) for poultry are:

- â Chick mash
- â Growers mash
- â Finisher mash
- â Layers mash

Feed should be rich in protein, vitamins and minerals. There should be occasional provision of

vegetables like

â Water leaf *Talinum fruticosum*

â Tridax – *Tridax procumbens* *Amaranthus* spp.

16.7.4 Hygiene

â The feeding and water trough should be cleaned daily. Refill water trough with clean water daily.

â Dry wood shavings should be used as litter materials.

TABLE 16.1 Feed requirement for birds

Type of Bird	Type of Mash	Protein (%)	Age of Bird (weeks)
Chicks	Chicks mash	18	1–6
Growers	Growers mash	13	7–18
Layers	Layers Mash	16	21 and above
Broilers	Broilers starter	21	1–5
Broilers	Broilers finisher	23	6–12

â Wet area should be removed immediately.

â Remove all cobwebs from the pens and cages.

â Separate young from adult.

â Breeds of the same type should be kept together.

â Visitors to the poultry should make use of the foot deep.

â Foot deep should be filled with disinfectant.

â There should be restriction of visitors and stray birds.

â Routine vaccination for birds against disease like new castle, fowl pox and gumboro.

â There should be regular deworming of birds using appropriate drugs.

â Cull sick birds, burn and bury properly dead birds. There should be regular disposal of poultry droppings. .

â Fumigate hatchery to reduce the incidence of pullorum disease.

â In severe cases consult a veterinary doctor.

16.7.5 Characteristics of a good layer

i. It has bright and bulging eyes.

ii. It has a bright red comb and wattle.

TABLE 16.2 Culling charts

Character	Layer	Non-Layer
Comb	Large, bright red, smooth, glossy	Dull, dry, scaly shrivelled
Face	Bright red	Yellowish tint
Vent	Enlarged, smooth, moist	Shrunken, dry
Pubic bones	Thin, pliable, spread apart	Blunt, rigid, close together
Abdomen	Expended, soft, pliable	contracted, hard, fleshy
Skin	Soft, loose	Thick, under-laid with fat

iii. It has a soft and pliable abdomen.

iv. It has pale coloured shanks.

v. It has broad and square head.

vi. It has a glossy plumage.

vii. It has a short beak.

viii. There is absence of broodiness

16.8 Other Management Practices in Poultry

(a) Incubation: This is the process of providing fertilised eggs with optimum temperature, relative humidity and ventilation for proper development. There are two types of incubation: natural incubation and artificial incubation.

i. **Natural incubation:** This is the process whereby the hen sits on the eggs after laying a number of eggs. The hen turns the eggs on regular basis. It lasts 21 days or more. It is not ideal for a large number of hatching.

ii. **Artificial incubation:** This is the process of using man-made device called incubator to provide necessary conditions that cause the eggs to hatch. The incubator can hatch several eggs at the same time.

(b) Candling: It is a process used to identify infertile eggs in the incubator. It is carried out on the seventh day and fourteenth day of incubation. It involves passage of concentrated beam of light through the egg.

Candling is carried out on large commercial farms.

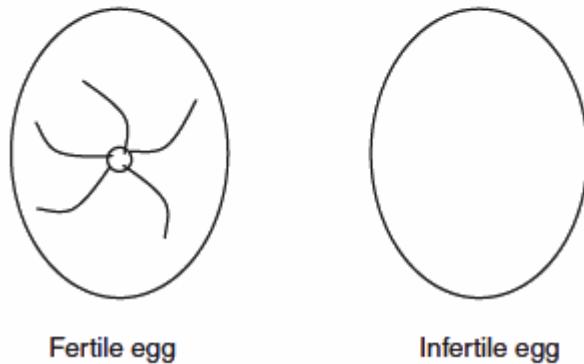
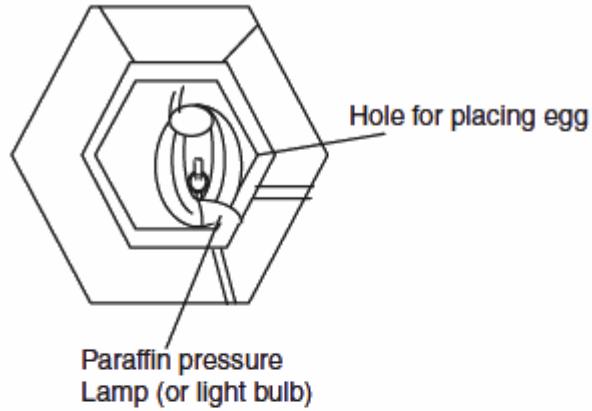


FIGURE 16.9 Paraffin lamp candler, fertile and infertile egg

TABLE 16.3 Equipment used in poultry

Equipment	Main Uses
Feeder/Hopper	Feeding birds
Drinkers	Provision of water
Brooder	Provision of warmth
Mash box	Feeding young chickens
Egg trays/crates	For collection of eggs
Nest boxes	For egg-laying
Battery cage	Housing of layers
Incubator	Hatching fertile eggs
Debeakers	Reducing the length of beak
Candler	Detecting unfertile eggs
Wheelbarrow	Carrying feed and removal of waste
Buckets	Fetching water
Roost/perch	For resting and sleeping
Broom	For sweeping off waste
Shovel	To remove poultry waste

16.9 Terminologies

Cock: male fowl above 1 year of age

Cockerel: male fowl below 1 year of age

Hen: female fowl above 1 year of age

Pullet: female fowl below 1 year of age

Chick: a young fowl (0–6 weeks old)

Capon: a castrated male fowl

Caponisation: process of castration in fowl

Treading: act of mating in fowl

Grower: fowl between 7 and 19 weeks of age

Layer: female fowl over 20 weeks of age that can lay eggs

Broiler: fowl reared for meat

Clutch: a group of young chicks

Chicken: meat of fowl

16.10 Rabbit

Rabbits are medium-sized, hopping mammals with long legs, long ears and short tails. They belong to the family Leporidae. They have simple stomach like pigs with enlarged caecum. The meat is very nutritious, low in fat, fine grained. It is a suitable alternative to poultry meat.

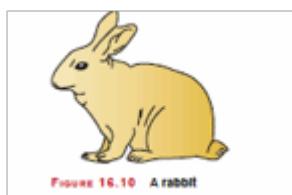


FIGURE 16.10 A rabbit

16.10.1 Some breeds of rabbits

1. California white
2. Flemish giant
3. California red
4. Chinchilla
5. New Zealand white
6. New Zealand red
7. Angora
8. Blue beveren

16.10.2 Housing

â Rabbits are normally housed in hutches or cages.

â Some hutches have a floor space of 2.6 m² for a doe and her litter till 8 weeks.

â Average breeding hutches is 75 cm Å— 60 cm for small breeds and 120 cm Å— 60 cm for largest breeds.

â For commercial producers, hutch of 2 m² is ideal.

â The height varies from 46 cm to 72 cm.

â Those used for fatteners may be about 41 cm.

â They can be constructed in single units, double or even three-tie units.

â The floor space is 1.5 cm with wire mesh which allows for disposal of the faeces.

â Hutches are made of wood with wire netting and asbestos roofing, although bamboo splits and teak pole with thatched roof can also be used. The floor should be smooth and slope from the middle to the side to allow adequate drainage of urine.

â The cage should be 1 m from the ground.

â Nest boxes should be provided to avoid contamination of the young ones. They are of removable

type which are fitted during parturition. The boxes should be about 0.3 m high, 0.3 m deep and about 0.5 m wide with drain at the bottom for urine.

Battery cage: is used for fatteners that are raised from 4 weeks (weaners) for slaughtering purposes.

Weaners: are raised in groups of 40–50 animals and killed off at 8 weeks.

Bedding: Alternative weaners can be raised on solid floor with 9–12 cm thick sawdust or wood shavings. The solid floor must allow 0.5 m² per rabbit.

16.10.3 Feeding

- â Rabbits can be maintained on ration consisting of roughage, home-grown vegetables and cereals.
- â They are fed with concentrates in mash form. In commercial operation they are fed with pellets. Green feeds such as waterleaf, sweet potato leaves, *Aspilia africana*, *Stylosanthes gracilis* and *Centrosema sp.* are also fed. Rabbits can also be fed with poultry feeds like growers mash.
- â Dry doe and buck should be given 90–120 g of pellet per head per day.
- â Pregnant doe should be provided with 120–140 g of concentrate per head per day for 14 days after mating.
- â Weaners should be fed ad libitum.
- â Feed should be supplied in feeders.
- â Fresh water should be put into the watering trough every morning.

16.10.4 Hygiene

- â Remove ruminants of any green seed that has not been consumed by the following morning.
- â Clean the feeders and wash the water trough daily.
- â Clean and disinfect the floor at intervals.
- â Provide foot deep at entrance of the rabbit house.
- â Deworm rabbits using appropriate drugs.
- â Removal of cobwebs and dust from the surroundings.
- â Cut bushes around the surroundings.
- â Isolate sick animals.
- â Bury or burn dead animals.

16.10.5 Terminologies used for rabbits

Buck – an adult male rabbit

Doe – an adult female rabbit

Kitten/warren – a young or baby rabbit

Hutch – the house of rabbit

Kidding – the act of parturition in rabbit

Pelt/fur – the skin of rabbit

Litter – all the young rabbits produced at the same time by one doe

Dam – the mother of a set of young rabbits

Sire – the father of a set of young rabbits

Sucking – Feeding of young rabbits on their mother's breast milk

16.11 Importance of these Management Practices

A proper livestock management practice has the following benefits:

- â The orientation of a farm animal house provides a conducive atmosphere for the animal to perform at optimum.
- â Where all necessary facilities like wallowing, pen and nest are provided, there will be increased output and profit.
- â For maximisation of profit, animals should be given specified amount of food and water required at particular time.
- â When animals are given balanced ration, it helps them to convert these feeds into different products.
- â When animals are provided with good sanitary condition, it will reduce the incidence of disease and pest. Good hygiene reduces mortality rate.

Activities

1. (a) Visit a nearby farm and identify the type of housing used for different animals.
- (b) List various equipment and their uses on the farm.
2. Group the students into two and allow them to establish a poultry and rabbit farm in the school. Record reports of activities carried out on the farm on a daily basis

SUMMARY

- â—† Livestock management refers to the series of activities carried out by a farmer and his ability to fend and care for farm animals which starts from day to day to the point of marketing or disposing the farm animal.
- â—† Livestock management entails provision of adequate housing facilities, good feeding and good sanitation.
- â—† The management of different farm animals is classified as intensive system, semi-intensive and extensive system.

Review Questions

1. Describe briefly the management of rabbit under the following headings.
 (a) Housing
 (b) Feeding
 (c) Hygiene
 (NECO JUNE 2002)
2. State three advantages and three disadvantages of each of the following management system in poultry production.
 (a) Deep litter system
 (b) Battery cage system
3. List four differences between battery cage system and deep litter system in poultry management.
4. (a) Explain the term candling in chicks production.
 (b) Write notes on the intensive method of managing poultry under the following headings
 - i. Hygiene
 - ii. Feeding
 (WASSCE JUNE 2006)
5. (a) State seven characteristics of a good layer.
 (b) The recommended floor space for fowls in deep litter house is three adult fowls per m². Calculate the number of adult fowls that can be kept in a deep litter house of size 10 m × 50 m.
 (c) State three other methods of keeping poultry (SSCE JUNE 1996).

Objective Questions

- 1.** The production of chicks on a large scale can be achieved using a/an
 - (a) incubator.
 - (b) broiler.
 - (c) candler.
 - (d) debeaker.
- 2.** The term barrow used in pig management refers to
 - (a) meat of pig.
 - (b) pregnant sows.
 - (c) weaned piglets.
 - (d) castrated piglets.
- 3.** The process of removing a young animal from its mother is referred to as
 - (a) breeding.
 - (b) weaning.
 - (c) culling.
 - (d) isolation.
- 4.** A young rabbit is called
 - (a) buck.
 - (b) dam.
 - (c) doe.
 - (d) kitten.
- 5.** Which of the following is not an advantage in the intensive system of livestock management?
 - (a) It encourages fast growth rate.
 - (b) It is capital intensive.
 - (c) It can be practised on commercial scale.
 - (d) Movement of livestock is restricted.

Answers to Objective Questions

1. a
2. d
3. b
4. d
5. b