MANAGEMENT OF CATTLE

This is the care given to cattle to improve and maintain a high production.
A stockman is the person entrusted with the work of caring for livestock on a farm

Qualities of a good stock man

a) Should be kind to the animals by avoiding rough treatment that can cause injury and death to animals
b) Should know well the monthly or routine operations on the farm like drenching, vaccination to reduce risks of disease and death of animals
c) Should have a high ability of identifying sick animals and those on heat for prompt action.
d) Should be able to identify and remove dangerous objects from the farm to reduce injury to livestock
e) Must be able to keep good up to date records for reference purposes
f) Should be able to take correct decisions as and when required to reduce losses on the farm
g) Should be honest to reduce losses to the farm
h) Should be healthy and energetic so as to carry out work as and when required
i) Should be highly knowledgeable in livestock management to ensure high animal production
j) Should be able to do work on the farm under minimum supervision from the high officers

LIVESTOCK MANAGEMENT PRACTICES

These are operations done on cattle to ensure high production. They include the following:

- Feeding.
- Branding
- identification
- Housing.
- Castration
- Dehorning.
- Restraining
- Grooming
- Casting / putting animals down
- Vaccination
- Hoof trimming
- Drenching / dehorning

1. DEHORNING:

This is the removal or suppression of horns on animals. Suppressing horn growth at an early stage is called **Disbudding**

Importance

- To make the handling of the animal move easy especially during drenching, castrating, ploughing e.t.c.
- To allow more animals to fit in space during transportation of the animals and even in kraals.

- To reduce injury which is may be caused by horned cattle to others.
- To prevent the destruction of farm structure like fences by animals that are horned.
- To beautify animals hence making them more appealing.
- It introduces uniformity in a herd
- Makes animals to grow faster as nutrients meant for horn development are used in growth

METHODS OF DEHORNING

The method used will depend on the age of the animal, farmer's skill and to some extent capital. Methods used in dehorning are;

- Use of caustic pencils or chemical dehorning
- Use of hot iron
- Use of dehorning saw
- Use of a rubber ring
- Use of dehorning wire
- Use of dehorning clippers

i) Chemical Method:

This is where caustic pencils or sticks are used in suppressing horns by rubbing it against the horn buds. It's done to young animals between 3-14 days of age.

Procedure

i. Restrain the calf using ropes and cast it down
ii. Clip the hair around the horn bud to expose it
iii. Rub the caustic sticks or pencils are against the horn bud until bleeding occurs
iv. Apply fly repellants and antibiotics on the wound created
v. Release the calf after the operation
vi. Do not allow the calf into rain for a few days for faster healing of the wounds.

ii) Hot iron method:

This is where a hot iron is applied on the horn bud to burn and kill the growing cells.

Procedure

i. Restrain the calf using ropes and cast it down
ii. Heat the iron in fire or gas until it's red hot.
iii. Apply the hot iron around the horn bud for about 10 seconds to burn the growing cells.
iv. Care should be taken not to go deep as it can damage the brain
v. Apply fly repellants on the wound created to keep away flies and stop the wound from becoming septic respectively
vi. The animal should be released after the operation
vii. Monitor the animal to ensure that it does not go under rain

iii) Use of a rubber ring and elastrator

A rubber ring is placed at the bottom of the horn bud which will stop blood supply to the horn and cut it off with in three to six weeks depending on the size of the horn. It is done on small horns at early age

Procedure

- Restrain the animal in a crush or using ropes
- Use an elastrator to stretch out the rubber ring
- Place the rubber ring at the base of the horn and remove the elastrator to release the rubber ring
- Release the animal after the operation

iv) Use of dehorning saws:

- This is used where the horns have grown up and is long enough. The horns are cut off near the base after restraining the animal.

Procedure

i. Restrain the animal using ropes and cast it down
ii. Administer a localized pain killer in the skin surrounding the horn
iii. Tie a piece of thin rope around the base of the two horns to control bleeding
iv. Cut off the horn at the base using a dehorning saw
v. Repeat the same procedure to remove the second horn
vi. Use a hot iron to seal the wound to stop bleeding.
vii. Apply insect repellants and antibiotics on the wound
viii. Release the animal after the operation and closely monitor it to assess the healing process
ix. Remove the ropes around the base after two days

v) Use of dehorning wire

This where a brittle wire is stretched and rubbed against a horn until it is cut off. The animal is restrained and the operation carried out

vi) Use of dehorning clippers

Dehorning clippers are tools with open blades that remove horns by cutting.

They are used in the removal of large horns

2. CASTRATION:

It's the practice of rendering male animals sexually unfunctional.

Reasons for castration:

- To prevent the bad smell especially in the Billy goats.
- To prevent undesirable males from breeding.
- To make the animal docile and easy to work.
- Castrated animals grow faster and produce quality meat.
- Castration increases the quality of wool in sheep as more nutrients are channeled to the development of the wool.
- It helps in the control of venereal diseases like contagious abortion.
- It controls in breeding on the farm when males born on the farm are castrated.

Methods of Castration.

There are two main methods of castration namely:

- Open operation/ castration.
- Closed castration

1. Open castration:

This is where the scrotum is opened to remove the testicles. It can also be referred to as surgical operation.

This requires a sharp knife or blade to split the scrotum vertically up to the bottom for better bleeding.

Advantages of open castration

1. Ensures complete castration of the animal
2. It's a cheaper method of castration since can be done using local implements like the knife

Disadvantages

1. It requires a lot of skill to be carried out
2. There is a high risk of infection due to the wound created
3. It is slow to be carried out
4. There is risk of over bleeding more especially in mature bulls

Procedure of carrying out open castration:

1. The animal should be restrained first using ropes**.**
2. Wash your hands using clean water and soap or wear clean gloves.
3. The scrotum of the animals should be washed and disinfected using clean warm water and soap
4. Dry the scrotum using a clean hand towel
5. Apply a localized anaesthesia a round the scrotum to reduce pain
6. Pull and squeeze the scrotum to locate the testes
7. Use a clean blade or knife to cut the scrotum vertically in order to remove the testes.
8. Pull the spermatic cords out and tie it using a clean string
9. Cut the spermatic cord just below the knot to release the testis
10. Repeat the same procedure to remove the second testis
11. Seal the wound to stop bleeding by using a hot iron
12. Apply fly repellants on the wound to keep a way flies
13. Apply antibiotic cream to stop the wound from becoming septic
14. Release the animal and keep it in reach for easy supervision

2. Closed castration;

This is a type of castration which is done without opening the scrotum. It can be done using the burdizzo/**burdizzo method** or using a rubber ring/ **rubber ring method**

A burdizzo is an instrument with handles which exerts pressure on closing it's jaws while a rubber ring is a thick round rubber which is stretched using an **elastrator** before being placed on the **"neck"** of the scrotum.

Advantages of closed castration

1. It's a fast method of castration
2. Does not require a lot of skill
3. No bleeding experienced
4. Less risk of infection since no open wound is created

Disadvantages

1. Chances of a failed castration are common
2. It is expensive to buy a burdizzo
3. Castration using a rubber ring is very painful

Castration using a burdizzo

1. Restrain the animal using ropes and cast it down
2. Pull the scrotum down wards to locate the spermatic cords, ducts and nerves
3. Open the jaws of the burdizzo by pressing the handles out wards
4. Place the burdizzo at the "neck" of the scrotum
5. Press the handles of the burdizzo in wards to lock the jaws and crush the spermatic cords, ducts and nerves
6. Open the jaws of the burdizzo and remove it from the crushed area
7. Release the animal after the operation
8. Keep the animal within reach for easy supervision

Castration using a rubber ring:

Here a strong rubber band is straightened using an **elastrator** and fixed around the "neck" of the scrotum. This cuts off blood supply to the scrotum and the testes which eventually degenerate and fall off after sometime. It's the most painful method of castration though very effective. The farmer doesn't expect any development of the scrotum for a life time.

4. IDENTIFICATION:

This is the practice of putting marks,numbers and labels on the bodies of farm animals

Reasons/Importance of animal identification

- Enable a farmer to recognize his animal in case it's lost.
- To facilitate record keeping.

Methods of identification:

The main methods of identification are:

- Branding
- Ear tagging
- Tattooing
- Ear notching
- Naming

A. BRANDING

This involves sealing numbers, letters, designs or a combination of this on the skin of the animal.

Methods of branding

These include:

- Hot iron branding
- Chemical branding
- Freeze branding

1. Hot Iron branding

This is done using a **branding iron** which is heated and stamped on the animal skin to leave marks for identification. Branding is done on the less valuable part of a hide like lower part of the thigh, jaw and hump

Procedure of hot iron branding

- Restrain the animal in a crush
- Heat the branding iron in fire or gas until red hot
- Stamp the hot iron on a less valuable part of the animal to burn the skin and leave marks
- Remove the iron from the skin after a few seconds
- Release the animal from the crush

2. Chemical branding

In this method, corrosive chemicals are applied on the skin causing leaving marks on the skin.

- Restrain the animal in a crush
- Clean the area to be banded
- Dip the branding equipment in the branding chemical
- Apply the chemical to the less valuable parts of the hide.
- Release the animal fro the crush

3. Freeze Branding

This involves applying liquid nitrogen to the skin which freezes the hair follicles so that they die and stop hair growth in that area.

A branding iron can be dipped in liquid nitrogen and then applied on the skin. The method is good since the skin / hide is not damaged and hence can be applied to any part of the animal.

B. EAR TAGGING

Eartags are made of light metals or strong plastics written on with different numbers, letters or designs.

The ear tags are of two types.

- piercing (self – piercing tags)
- non-piercing

The self fixing tags will be fixed on to the ear with force while a non – piercing ear tag, a hole must be made where it is fixed. An ear **tag applicator** can be used in stapling piercing ear tags on the ear

C. EAR NOTCHING

This involves cutting V – shaped notches on the edge of the ear using sharp scissors or pincers. This method is popular in pigs because of their soft skin. The number and location of notches on the ear can be used for identification

D. TATTOOING

A special ink is used to inflict marks on the skin of the animal more especially inside the ear. The hair must be removed from that place before tattooing.

E. NAMING

Animal are given specific names for identification depending on a number of things like origin, coat colour, e.t.c.

4. RESTRAINING

This is the hindering of movements of animals by physical force. It's done so as to perform operations on the animals like: dehorning, castration, de-worming, identification, vaccination and drenching with minimum disturbance.

The amount of force applied during restraining depends on the temper, size and type of the animals. Cattle are not restrained in the same way as goats.

5. CASTING

This is a practice of putting animals down and it's done when animals are to be controlled for a long time during operations like castration, dehorning and identification.

6. GROOMING

This involves brushing off loose hair, dung, dirt and lice from the skin of an animal

Reasons for grooming

- To stimulate blood and lymph circulation in the body of the animal
- To remove loose hair, lice and other external parasites
- To facilitate mating in animals
- For cleanliness and good appearance for the animals
- For production of clean milk in lactating animals

7. HOOF TRIMMING

This involves removing overgrown parts of the foot which impairs movement of the animal. It controls lameness in animals

8. CULLING

This involves removing un-productive and sick animals from the herd for slaughtering / selling. It controls disease spread and wastage of feeds on the farm

9. VACCINATION

This is done in order to control highly infectious diseases in livestock e.g. Swine fever, foot and mouth disease, New castle, rabies etc.

10. DRENCHING

This involves administering oral treatment to animals. Its done using a drenching gun/bottle to control internal parasites like liver flukes, round worms, tape worms, hook worms.

11. ROUNDING UP

This is done in beef animals and it involves bringing all animals on ranch in the centre of the kraal for the following reasons:

- Castrate and vaccinate animals
- Physical assessment of the animals
- To separate animals according to age, sex, type etc.
- To cull and market un productive animals
- To wean calves of at the right age
- To carry out pregnancy diagnosis

12. HOUSING

The main reasons why animals are housed are

- To protect animals from bad weather condition mostly young ones
- To provide animals with a good opportunity of being fed well
- To provide an area for special handling of the animals e.g. Crushes, dips, spray etc.
- To provide a conducive environment for production and temporary storage for milk (quality milk)
- To provide conducive working conditions for the farmer

Qualities of a good animal house

1. Provide an adequate floor space to avoid overcrowding
2. Should be water proof to avoid damp conditions that breed pathogens
3. Should have a concrete floor which is easy to clean
4. Should provide adequate light since it affects the productivity and behaviour of animals
5. Should have adequate ventilation to control respiratory infections
6. The floor surface should have a gentle slope to allow urine to drain off easily
7. Should be built in such a way that animals can easily see each other

14. VACCINATION:

Is the introduction of vaccines into the animal`s body to induce immunity.

FACTORS CONSIDERED BEFORE VACCINATING ANIMALS

Age of the animal; animals are vaccinated basing on their ages because specific vaccines are manufacture for specific ages. A young animal should be given its appropriate vaccine and some applies to the mature animal.

Type of vaccine; the vaccines to be used should be in line with the diseases one is trying to prevent and should be given at a proper stage.

Skill of veterinary doctor; vaccination should be carried out by a trained personal in order to do it effectively without causing more injections on animal.

Cost of vaccines; a farmer should be able to purchase vaccines for the diseased animals and government should know the prices in order to make them affordable by most peasant farmers.

Health status; the animals should not be vaccinated when they are sick

Precautions Taken Before Vaccinating Animals

- Don't mix 2 vaccines together when administering to the animal.
- Avoid exposure of vaccines to higher temperatures during transit
- State the vaccines in deep freeze or in flasks

- Use distilled water when mixing vaccines
- Vaccination should be done in cool hours of the day.
- Vaccinate all animals or birds once
- Use clean equipments and disinfected ones follow manufactures interventions when mixing given antibodies or vitamins to animals to reduce stress after vaccination.

15. CRUTCHING

Is the removal of faeces/wool from the area under the tail and the hind legs in sheep. In females these fibres get strained when urinating.

The wet faeces is known to cause skin irritation to the animal. It's known also to attract flies.

16. RADDLING

Is a practice of identifying male animals that have mated with females in a flock

17. DOCKING

Is the removal of tails from lambs. It's done in sheep and its carried out at the age of 1-3 months. It's done by use of sharp knife or rubber ring. The tail is cut off and the hot iron passed over to seal off the blood vessels so as to prevent over bleeding. Docking is done to facilitate mating so as to make mating easy for the ram.

18. FLUSHING

Is the practice of feeding carried out on ewes and sows towards oestrus period, female animals are feed on extra nutritious feeds before they are served to ensure that during ovulation many eggs are released.