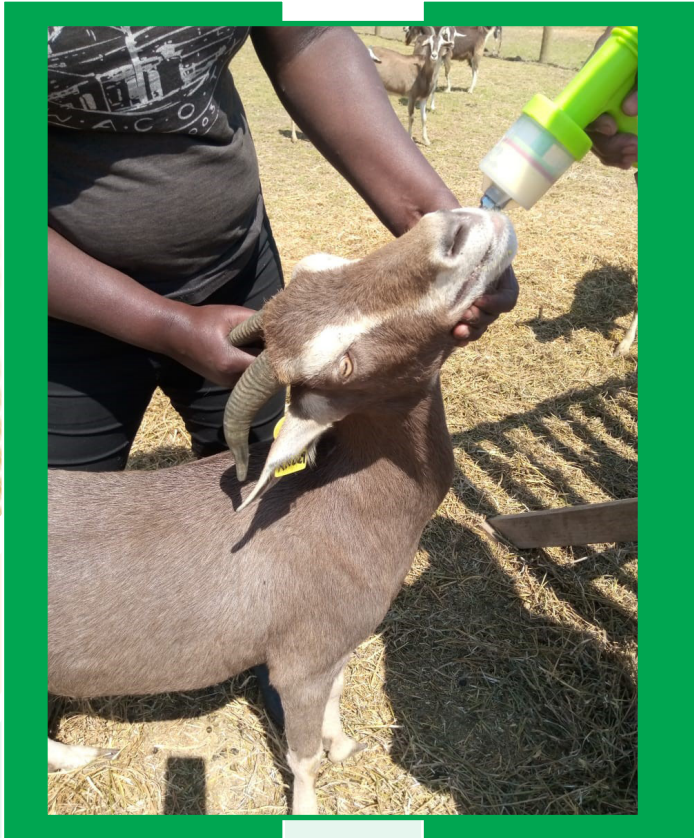


Dairy Goat Health Management



Common diseases and conditions

Diseases contribute to economic losses through cost of treatment, premature culling, reduced productivity and mortality. Rearing healthy goats is achieved by prevention, control, early detection of the disease and treatment. This enhances productivity through increased milk production, fast growth rate, increased reproduction, and increased availability of replacement stocks in the flock.

Note: It's advisable that farmers consult a veterinarian in case of disease occurrence on the farm.

Common diseases and conditions

| Disease | Description | Clinical Signs | Management |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bacterial Diseases | | | |
| Foot rot | <ul style="list-style-type: none">● Affects cloven footed dairy goats● It is pre-disposed by muddy conditions and overgrown hooves | <ul style="list-style-type: none">● Lameness● Swelling of limb● Bad odour due to dead tissues | <ul style="list-style-type: none">● Hoof trimming● Isolating and treating the sick dairy goats● Disinfectants in footbath● Ensure goat premises is dry |
| Contagious Caprine Pleuropneumonia (CCPP) | <ul style="list-style-type: none">● It is a severe disease of respiratory system● It has 100% morbidity, 80% mortality | <ul style="list-style-type: none">● Difficulty breathing● Frothy nasal discharge● Coughing● Grunting due to pain | <ul style="list-style-type: none">● Vaccination● Isolation of affected dairy goats |

| | | | |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pink eye/ kerato-con- junctivitis | <ul style="list-style-type: none"> ● It is an infectious and contagious disease transmitted through contact with infected dairy goats, insects carrying organisms or dust | <ul style="list-style-type: none"> ● Eye swells and bulges out ● Red conjunctiva ● Growing spot in middle of eye ● Cornea burst if not treated ● Blindness | <ul style="list-style-type: none"> ● Isolate the sick from the flock |
| Enterotox- aemia/ pulpy kidney | <ul style="list-style-type: none"> ● Severe disease that affects young, fast-growing kids | <ul style="list-style-type: none"> ● Kicking of belly ● Diarrhoea ● Sudden death | <ul style="list-style-type: none"> ● Vaccination annually before onset of rains ● Change feeds slowly |
| Mastitis | <ul style="list-style-type: none"> ● It is a bacterial infection characterized by inflammation of udder | <ul style="list-style-type: none"> ● Clots in milk ● Mucus in milk ● Swollen, hard and painful udder ● Reduced milk production in subclinical mastitis | <ul style="list-style-type: none"> ● Hygiene; houses, udder, attendant ● Cull chronic does ● Use of strip cup regularly to detect infected does ● Dipping teats in teat dips after milking |
| Viral Diseases | | | |
| Orf | <ul style="list-style-type: none"> ● It is a highly infectious pox virus disease ● It is transmitted through contact with infected dairy goat or equipment | <ul style="list-style-type: none"> ● Pustular and scabby lesions in mouth, udder ● Emaciation due to reduced feed intake. ● Difficulty breathing | <ul style="list-style-type: none"> ● Vaccination ● Isolating the sick to control the spread |

| | | | |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Goat plague/ Peste des petits Rumi- nant (PPR) | <ul style="list-style-type: none"> ● It is a notifi- able disease that is acute and wasting disease | <ul style="list-style-type: none"> ● Mucopuru- lent nasal and ocular discharges ● Enteritis and pneumonia ● Necrotizing and erosive stomatitis ● Fever | <ul style="list-style-type: none"> ● Vaccination ● Restrict move- ments of dairy goats |
| Tick-borne diseases | | | |
| Heart water | <ul style="list-style-type: none"> ● Infectious disease that is transmitted by tick | <ul style="list-style-type: none"> ● Sudden high fever ● Nervous signs; circling, chewing movements ● Recumbency ● Convulsion ● Difficult breathing | <ul style="list-style-type: none"> ● Tick control |
| Reproductive disorders | | | |
| Abortion | <ul style="list-style-type: none"> ● It can result from non- infectious or infections causes ● Infectious causes e.g brucellosis ● Non-infectious causes e.g. trauma, stress | <ul style="list-style-type: none"> ● Premature birth | <ul style="list-style-type: none"> ● Isolate aborted doe from the flock to control spread ● Contact a veteri- narian to submit samples to diagnostic lab for confirmation ● Separate pen for inkid does |

| Nutritional disorders | | | |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acidosis | <ul style="list-style-type: none"> It refers to a condition in which there is too much acid in the body fluids. It occurs when the kidneys and lungs cannot keep body pH in balance. | <ul style="list-style-type: none"> Difficult breathing Jaundice Increased heart rate Fatigue Sleepiness Decreased milk production | <ul style="list-style-type: none"> Drench with a solution of sodium bicarbonate Treat with an antibiotic to suppress lactic acid producing bacteria Feed hay |
| Ketosis | <ul style="list-style-type: none"> It happens when the body mobilizes fats for energy production resulting in increased circulation of ketones in the body | <ul style="list-style-type: none"> Depression Decreased milk production Lack of appetite Goat's breath has a sweet smell Rough coat | <ul style="list-style-type: none"> You should increase energy content of the feed during the last six weeks of pregnancy Prevent obesity in pregnant does Ensure proper exercise for confined goats daily |

Parasites

Parasites that affect goats are classified into ecto- (external) and endo-parasites (internal). Description of most common parasites, their clinical signs and management are outlined in the table below;

| Classification | Description | Clinical signs | Management |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------|
| Ecto-parasites (External parasites) | | | |
| Ticks | Ticks feed on blood of the animals. Examples of such ticks in goats include red-legged ticks and bont-tick | Irritation, rough hair coat, anaemia | Practice rotational grazing, spraying or dipping, pour-on, clearing bushes around goat houses |

| | | | |
|--------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Fleas, Mites, Lice | They are the ecto-parasites living by feeding on blood and nutrients of the host. | Irritation, rough hair coat, anaemia | Sanitation in houses, shearing, application of tick grease, spraying goats and dusting houses |
| Endo-parasites (Internal Parasites) | | | |
| Trematodes (flukes) | They live in the liver and derive their nutrients from it, e.g., Liver fluke. | Rough haircoat, diarrhoea, anaemia, weakness, wasting, coughing, stunted growth | Practice hygiene, deworming |
| Nematodes (round-worms) | Nematodes are parasitic worms lodged in the stomach of live-stock. | Rough haircoat, diarrhoea, anaemia, weakness, wasting, coughing, stunted growth | Practice hygiene, deworming |
| Cestodes (flat worms) | They live and derive their nutrients from the host for their survival, e.g., Tapeworms | Rough haircoat, diarrhoea, anaemia, weakness, wasting, coughing, sub-mandibular oedema, stunted growth | Practice hygiene, deworming |

Vaccination programme

Vaccination is a preventative treatment done in advance to prevent the occurrence of a disease. The vaccination programme for dairy goats is outlined in the table below;

| Disease | Age at 1 st vaccination | When repeated. |
|-------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|
| Foot and mouth disease | 4 months | Repeat after 6 months |
| Orf | 5-6 weeks | Annually and semi-annually in high-risk areas |
| Enterotoxaemia | 8 weeks for kid if dam is vaccinated. 1 st week if dam not vaccinated. | Once in a year before onset of rains |
| Contagious caprine pleuropneumonia (CCPP) | 3 months | Yearly |
| Peste des Petits Ruminants (PPR) | 3 months | Yearly vaccination |
| Anthrax | 6 months | Once in a year in affected areas |
| Haemorrhagic septicaemia | 6 months | Once in a year before onset of rains. |



Kenya Climate Smart
Agriculture Project



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