

DAIRY GOAT FARMING

The main dairy goat breeds include:

- Alpine
- Saanen
- Toggenburg

The above can be crossed with the Small East African and galla goats.

Always contact the dairy Goat breeders Association on 0722979075 for the best breed in your area.

Selection of breeding doe

Productivity of a flock depends on the quality of the mother.

- Select does with high milk production and high fertility rate. The doe must be well built and healthy.
- A female should not be mated unless it's physically fit.
- Thin females do not come to heat, they become pregnant and abort or reabsorb the foetus at early stage. Those mated and carry their kid will be unable to rear it satisfactorily.
- Legs should be checked for deformities and hooves trimmed. Good strong legs are essential for breeding doe. Weak bent hind legs are highly heritable factors and females the condition should not be selected for breeding.
- It should produce kids every 8-10 months.
- It should produce twins frequently.
- It should produce enough milk to rear the twins and for household consumption
- The udder should be soft to touch with two functional teats, any hardness indicates the female has had a problem e.g. mastitis.
- Long pendulous udder is highly heritable and females with this should not be used for breeding. Big udder is liable to tearing by thorns and kids have difficulty in suckling them and do predisposes the doe to mastitis.
- Badly worn teeth indicate old age. Females with split, missing or worn teeth should not be selected for breeding as they are physically unable to browse or graze properly.

Selecting of breeding bucks

- The buck must be healthy, strong and should have a well-developed body frame. It must be of productive breed, have normal sexual organs and well developed

testicles. The buck must be selected from does that produce a high volume of milk and are prolific.

- Control mating i.e. limit the number of does per male (the recommended ratio is 1 male for 35 does)
- The buck must be free of any physical defects e.g. undershot jaws, overshot jaws
- It should have a strong masculine head and neck. Needs to be noisy, seek out females on heat and mate them, if shy and timid cull.
- Badly worn teeth indicate old age. Males with split, missing or worn out teeth should not be selected for breeding as they are physically unable to browse or graze properly.
- Legs should be checked for deformities and hooves trimmed.

Housing

- Provide a house that allows a space of 2m² for every goat .
- The floor should be well drained and easy to clean.
- It should protect them from extreme weather eg cold, wind, etc
- The house should allow space for feed trough, water trough, kid pens, feed store and mineral troughs.

Feeds

Goats require five major classes of feeds,

- Energy
- Protein
- Vitamins
- Water
- Mineral salts

Goats consume a wide variety of grasses, weeds and small branches of bushes and trees. They can consume leaves, peelings and roots of vegetables, husks of corn, citrus and banana peeling plus other waste plant residues.

Goats are ruminant and therefore chew cud and are able to utilise roughage with high fibre content. They produce protein, vitamin B and K in the rumen.

Goats are fastidious feeders as a result they are the last animals to die from drought.

Protein Sources

- *Leucaena, Calliandra, Mulberry, Grevellia, Gliricidia, Sesbania, Tithonia, Lantana camara, Siratro, Sweet potato vine, Clitoria ternatae, Lucerne, Desmodium,*
- Most of these herbaceous legumes have anti-nutritional factors (eg tannins and cyanides). It's recommended that these should not exceed 25% of the total feed requirement per day. They should be wilted before feeding.
- Groundnut cake, cottonseed cake, Sunflower cake can also be good sources of proteins

Energy Sources

- *Rhodes grass, Napier grass, Panicum spp, Cenchrus spp, Sorghum, Bana grass.*
- Banana stems and leaves should be fed as a last resort to feed demand.
- Maize, millet, Rice, Wheat, Barley, oats Sorghum others include bean haulms, Sugar cane tops, Sunflower heads.
- Maize germ, maize bran.

Care of Pregnant Doe (She-goat)

- Protein supplements are important during the dry period (non lactating period). This is because the kids are growing faster at this time.
- If you have been feeding legumes which are high in calcium its best to replace these with high energy feeds (e.g. hay) at least three weeks before kidding to prevent milk fever. This forces the doe to mobilise its own body stores and prepare for milking.
- Deworm the doe two weeks prior to kidding
- A goat requires 3% (of its body weight in dry matter approximately 1.5 kg) per day or 5 kg of fresh materials should be availed to the doe per day. The complete meal should comprise of both the protein and energy feed.
- Provide the does with salt lick and at least either half a kilo of dairy meal per day or a mixture of pollard and bran
- Provide adequate clean water all the time.

Care of lactating doe

At the end of the 5th month, observe the following signs for approaching birth;

- Reduced feed intake
- Rapid breathing
- Doe will constantly look back unto her sides as if expecting to see young ones.
- Enlarged udder that may or may not discharging colostrums.
- Swollen vulva with thick mucus discharge.

- The hair around the tail and rear should be clipped and fresh beddings (straw or grass) provided.
- The kid is born after short labour, incase of difficulty in kidding consult an expert(Vet doctor)

Feeding lactating doe

- Amount of concentrates fed should be in proportion to the amount of milk being produced.
- A small quantity of concentrates should be fed to the dry doe in order to build up the body reserves and help in the development of her unborn kid.This is fed in 2 daily portions.

Care of kids.

- To prevent naval infection, the stump of the umbilical cord should be cleaned and disinfected with iodine, strong salt solution or traditional herbal remedy.
- The new born kid should be placed in a warm area to protect it from strong winds (draft) and cold that may expose it to pneumonia.
- Kids are allowed to suckle the colostrums in the first three days after birth, the colostrum is very important to the health and growth of the kid.Colostrum contains antibodies that protect the new kid against diseases until they are able to protect themselves.
- The kid should be allowed to suckle enough milk so as to have the kid as future basis for breeding stock.
- Fostering is advisable if the mother dies or incase of infection of the udder (mastitis).
- Bottle feeding is an alternative in the absence of the mother.
- Introduce green chop and water after 1 week.
- Kids can be withdrawn from the mother at night so that the doe can be milked in the morning.
- Kids should be weaned at 4 months. Weaning before this time should be compensated with high protein supplements.

Vaccination schedule

Age	Vaccinate against	Application	Remarks

1 month and above	CCPP Contagious Caprine Pleuropneumonia	S/C Annual vaccinations	Only for goats, Sheep are not affected
2 weeks and above	PPR (Peste des Petits Ruminants) Goat plague	S/C Properly done once in a lifetime will do. Newborns should be vaccinated as a routine	Came to Kenya in 2006 - related to rinderpest. If no vaccination the disease can kill all your goats and sheep.
2 weeks and above	Sheep and Goat pox	S/C Annual vaccinations	If no vaccination this disease may kill lambs and kids. In serious cases mortality may be high.
2 weeks and above	Enterotoxemia + tetanus	S/C Every 6-8 months. Disease is common with lush pastures	Pregnant animals should be vaccinated at least a month before giving birth. Vaccination for tetanus should always follow tail docking
1 month and above	Orf	Scarification method. If there is a risk of outbreak or. In endemic areas routine vaccination is recommended	Orf may be more common in goats due to their feeding habits as browsers of thorny bushes. Mortality of young can be high. Repeat vaccination should be done 2-3 months after the initial one. The vaccine is live and can affect people, so HANDLE WITH CARE.

Record keeping

A farmer should keep simple records of :

- Birth dates
- Birth weights

- Sire and dam
- Milk records
- Treatment records
- Service dates

The records helps the farmer in decision making and in calculating profits and losses.

