GOAT PRODUCTION AND MANAGEMENT

A practical guide for farmers in Uganda



Joseph Masaba Kibuye

NARO

NaLIRRI

Background

Uganda's annual population growth rate stands at 3.32% and is one of the worlds' fastest. However, the annual per capita consumption of meat (6.6kg) and milk (40 kg) are lower than the developing world's averages of 26.4 kg and 48.6 kg. Further, the annual growth in livestock production (4%) has barely kept pace with the increasing demand for food of animal origin as reflected by the 80,000 metric tonnes consumption deficit. Household expenditure on animal products ranges between 20 -30% of total expenditure and the price elasticity of demand (% change in quantity demanded as a proportion of % change in price of commodity) for meat is very high.

Introduction

Considerable information is available on the reproductive function of goats, but research on reproductive management of goats in the Uganda has focused mostly on milk and meat production systems as the primary product. In a meat production system, however, reproductive performance is of paramount importance since productivity is largely a function of the number of offspring born and weaned and the frequency with which they are produced. The main reproductive concerns in meat production from goats therefore must be an optimum litter size (2-3 kids) with a high survival to weaning and, secondly, the flexibility to strategically breed does to produce kids that will fit a specific market niche to command a maximum price.

Housing

- House goats to protect them from adverse weather conditions. New born kids can suffer from extreme coldness
- House the goats on raised slatted floor. This helps to keep the goats clean
- Housing space is 1 square metre for two mature goats (30kgs in weight) or the weaners weighing up to 18 kgs.
- Avoid dampness and accumulation of manure in and around the goat house

Feeding

- Good nutrition is very important for profitable goat farming because it affects all other production parameters i.e. reproduction, growth, and disease resistance.
- Sufficient feed must be available throughout the year
- Lactating does have higher requirements compared to when they do not have kids
- During late pregnancy allow a lot of feed to increase the weight of the unborn kid and kid's ability to survive
- Kids must suckle and take in colostrum as soon as possible after birth to build up a natural resistance to disease and take in feeds
- Provide water to the goats at all times

Supplementation

Most locally available forages and crop residues are sufficient in protein and must be supplemented with a combination of energy and protein feeds

- Local energy sources are maize bran, rice bran, wheat bran
- Local protein sources are cottonseed cake, lablab hay, sunflower seed cake, sweet potato vines, calliandra leaf hay, and leucaena leaf hay.
- Local indigenous trees such as mangoes and ficus are good supplements during the dry season. They also have medicinal properties.
- Provide mineral blocks for goats to have regular access.

Production of legumes for supplementation

- Tree legumes like calliandra and leucaena should be planted in rows at edges of the garden.
- Forage should be stripped from the legume trees and the stemmy part left for firewood.
- Lablab should be under sown between the rows of perennial crops like bananas and coffee. And it should be cut back feeding before climbing the bananas or coffee trees.

Feeding guide

- Chop up the forage and place in a feed trough or box or tie the forage in bundles and allow to hang from a height of 3ft above the ground level.
- Provide fresh crop residues all the time. Use the following guide: -

➤ **Crop residues + 120 g dry legume leaves + 100 g bran or**

➤ **Crop residues + 60 g cotton seed cake + 100 g bran or**

➤ **Crop residues + 60 g sunflower cake + 100 g bran**

- Provide a mixture of forages or residues daily
- Allow the forage to lose some water by wilting for a day before feeding
- Harvest legumes and dry in shade. Store for use as supplement in the dry season

Reproduction and management

A farmer can use local or exotic breeds for goats for reproduction for milk and meat production. Such breeds include Boer exotic goats and their crossbreds, Mubende goats, Anglo-Nubian goats, Sannen goast and Togenburg goats.

- Mubende goats fit in diverse agro-ecological areas of Uganda
- Toggenburg and Sannen fit in high land areas of Uganda because they originate from temperate regions of the world.
- Aim at matting the goats to kid in hot months to control death due to chilly weather
- Don't use bucks that are related to the does for breeding
- Select fast growing and normal animals for use in the next breeding cycle and not for sell
- Before breeding give animals more feed to increase the number of eggs produced

Disease control and prevention

- Give a dewormer every four months ensuring the correct dosage
- Keep animals protected from cold and rain
- Avoid accumulation of manure in the house by cleaning the house regularly

- Keep the goats free of ticks and mites by spraying
- Feed goats well avoiding moldy feedstuffs
- Allow kids to suck their dams immediately after birth to benefit from colostrum
- Provide clean water for drinking at all times
- Separate sick animals from healthy ones immediately observed
- Seek veterinary help when animals are sick

Record keeping

- Give each goat a number or name
- Buy a hard cover book and have a page for each animal
- Keep a record of each event or activity regarding the animal such as date of birth, name of and breed of sire, name and breed of dam, date mated, date weaned, kidding date, weight at birth, date of sickness and cause/treatment done etc.
- An example of a record sheet

Name/number		
Date of birth		
Sire used		
Date	Description	
01.01.2014	Kidded twins (1 male and 1 female)	Wt 3.0 kg each
20.05.2014	Male kid died	Due to diarrhea
15.06.2014	Female kid weaned	Wt 17 kg

Gender and goat production

- Most of the actual goat husbandry work is carried out by women and children
- Goats are owned by all gender categories in a homestead
- It goat productivity is enhanced income and well being of the entire farm families will be improved

Marketing

- Sell animals that are not needed for breeding at one year of age or more.
- Take the weight using a tape and estimate weight of meat to be 45% of the live weight.
- Goats born in December/January are ready for the market around Christmas and those born in June/July are ready around June next year and these are periods of highest demand and returns.



For more information please contact:
Program Leader Livestock Breeding at the National
Livestock Resources Research Institute (NaLIRRI
E-mail: nalirri@gmail.com