

GOAT PRODUCTION

A guideline synopsis for BOER, KALAHARI RED and SAVANNA GOATS

INTRODUCTION

Goats are the world fourth largest population of domestic animals and the first (along with camels) on arid and semi-arid regions. Contrary to common beliefs it is the sheep (after cattle) and not the goats the major cause of desertification caused by uncontrolled grazing.

The adaptability of the goats coupled with the quality of its meat have prompted the development, over the years, of some breeds which are instrumental and a very important part of the meat chain Industry. South Africa is one of the countries which successfully contributed to such development and today the Boer goat , the Kalahari Red goat and the Savannah goat are very much sought after. Even locally the goat meat is second to lamb in demand and price .

The above mentioned breeds were developed with the main aim of producing meat without increasing their height (a common but uneconomical method to increase weight is to increase the height of an animal). Thus today we have these animals with well developed muscles but not lanky .



Kalahari Reds enjoying a pasture

PRODUCTION

There are three major goat production systems :

Extensive production: this is the most common way to farm goats and it is based on the utilization of arid and semi-arid areas where the animals make use of the sparse flora, mainly shrubs which cannot be utilized by other species except wild life. Obviously it is the most profitable system but it has also major constraints such as : vast areas required, km of water pipes, numerous boreholes and special fences to deter predators such as jackals , caracals and serval cats. Baboons are a grave problem in some areas and require special attention.



Young Kalahari Red kids about to be weaned

Semi- extensive (or semi-intensive) : this system is mainly used in bushy areas and savannah where cattle is the main enterprise. Since the goats are mainly browsers their activity does not interfere with the grazing of the cattle and in some instances are a necessity to clear or to control bush encroachment. This system requires a more intensive labour activity than the previous.

Intensive production : This system is found where agricultural land is scarce and expensive and generally situated close to a major Centre.

This is the system proposed and if it is well planned and managed it can become a very profitable enterprise.

The most important aspects to consider are :

1- Housing

2- Source of stock

3- Feeding

4- Breeding Plan

5- Hygiene & Health management

1- Housing

Adequate housing must be provided. It must ensure a comfortable life for the animals and easy access and execution of the labour's daily routine. The type of housing and material will be determined by the local availability and costs as there are various models of housing. However it must be simple in design but sturdy as goats are intelligent animals and are always in the look out for a "way out".

Provision should be made for 24 hours access to hay as goats like to "nibble" all day. This behaviour stems from the fact that these animals are selective browsers/grazers .



Feeding time in an intensive production system

2- Source of Stock

The base stock must be selected more on merit than on price as it will be the foundation of the enterprise. Unlike Dairy the basic flock will also be the supplier of the future generations of the breeding females, whilst the males will have to be substituted regularly.

The animals should be Pure Bred (Full Blood) and not what some Countries call "Pure Bred" but in reality they are upgraded cross bred animals .



A top Stud buck with proven progeny



Father & son

3- Feeding

Goats are very selective feeders (grazers & browsers) and tend to taste and eat anything. Contrary to a common belief, they are **not** the cause of overgrazing, soil erosion and subsequent desertification but , together with the camels the only species that can survive the consequences of overgrazing by cattle and sheep

Furthermore , if land and water are available , green pastures/crops can be planted to give the goats additional feed and periodical grazing. Crops such as Egyptian clover (barzim), alfalfa, Taiwan Napier grass , etc....

As mentioned earlier goats prefer to have some fodder available at all times . This is achieved by providing good hay on racks whilst the bulk of the feed should be provided two to three times a day.

The complete feed (Concentrates or TMR) required will vary from 1,5 % to 3 % of body weight , depending on the nutritional value of the feed and the quality of the hay available. Alfalfa would be an ideal source of quality fibre , but its price might not warrant a continuous supply . Hence it could be supplied at intervals between the principal feeding times.



Too busy to look up.

4- Breeding Plan

Under extensive or traditional conditions goats are seasonal breeders but their ability to breed and wean every 8 months can easily be utilized under intensive conditions. The mating of the flock can be distributed almost throughout the year by applying some simple principles on animals behaviour. Emphasis on fertility should be priority when selecting the base flock.



A doe close to kidding

Therefore a good doe will kid **three times every two years**. Under good management and reliable supply of feed the Kidding percentage is about 180 % . However for the purpose of this project a very conservative figure of 150 % is being used. This means that a doe on average will produce between **4 and 5 kids in two years** .

The mating season should be as short as possible (\pm **30 to 45 days**) and **1 Buck for every 25/30 does** , Under intensive conditions this is quite feasible.

The gestation lasts 5 months and the lactation period about 3 months. Half way along the lactation the does are mated again and so on. Kids are weaned at **3 months of age**, with females weighing \pm **25 kg** and males \pm **30 kg**. If the kids are destined to the Market, it is a common practice, then, to feed them for two to 3 weeks to get over the weaning stress and at the same time to gain additional weight by taking advantage of the Compensatory Growth trait, which is well developed in these breeds. In this case males are sold at \pm 35 kg and females at \pm 30 kg. Males are generally castrated a few days after birth as the males of this breed are sexually precocious and just before weaning could become quite active .

Normally 15 to 20 % of the female kids are retained for replacement and/or increasing the flock size. In this project however it should be also considered the establishment of a Stud flock obtained , through a selection program, from the progeny of the imported animals . This additional enterprise will provide quality bucks for breeding the commercial flock as well as a supply to the local market of quality breeding stock (which otherwise would have to import).

The key note of this productive system is the fact that a well fed and managed breeding female will produce 4 to 5 and some time 6 kids which grow up to market size **from the milk of the mother only** (the few extra days of feeding before marketing them is not of great significance).



The result of a good breeding strategy

5- Hygiene and Health

Management

It is obvious that all productive aspects pivot around a well managed flock in terms of Hygiene and Disease prevention (which is far more important than disease control). From the design of the buildings to the to the management of the various components of the enterprise , including the daily routines, all has to evolve around hygiene. It sounds harsh but it has to be implemented with ruthlessness.

Personnel must be well trained on this issue and access to outsiders must be limited to an area separate from the rest of the farm where samples can be shown.

Buiatrica Farming SA takes particular care in ensuring that the animals are healthy , particularly in respect of TB , Brucellosis and FMD. South Africa is free from CCPP, RinderPest, PPR, Sheep & Goat Pox , Scrapie and East Coast Fever.

