DRAFT 1		
REPORT ON THE INVESTIGATION INTO THE POTENTIAL FOR THE SOUTH AFRICAN GOAT INDUSTRY		
NATIONAL AGRICULTURAL MARKETING COUNCIL		
(NAMC)		
31 MARCH 2005		

CONTENTS

		Page
I	EXECUTIVE SUMMARY	4
II	RECOMMENDATIONS	6
1.	INTRODUCTION	7
2.	LITERATURE REVIEW (A WORLD'S PERSPECTIVE)	8
3.	HISTORICAL OVERVIEW OF THE SOUTH AFRICAN GOAT INDUSTRY	14
4.	FRAMEWORK OF INVESTIGATION	
4.1	To study the current status of the South African goat industry	18
4.2	To identify structures in the South African goat industry (with a view to propose more effective structures)	22
4.3	To assess the market potential for goats nationally and internationally	29
4.4	To assess the level of participation of different groups in the South African goat industry	36
4.5	To study the role of the goats in promoting food security	40
4.6	To investigate current marketing arrangements for the South African goat industry	43
4.7	To investigate the current status of data and industry information in the South African goat industry	47
5.	REFERENCES	50

Indigenous goats





Boer goats



Angora goats



I EXECUTIVE SUMMARY

South Africa is a relative small goat producing country and possesses only approximately 3% of Africa's goats and less than 1% of the world's number of goats. Approximately 96% of the world's goat numbers are in the hands of developing countries, but when traded, goat products are mainly consumed in developed countries due to its superior health qualities.

This study focused on the so-called Indigenous goat, the Boer goat and the Angora goat, but special attention was given to Indigenous goats, which are mainly in the hands of black farmers. White commercial farmers mainly own Boer and Angora goats while black farmers mainly own Indigenous goats in a communal farming system.

An effective marketing system for Indigenous goats had developed over many years and farmers are getting good prices for their animals due to the fact that demand exceeds supply. South Africa is a net importer of goats and goat products. The majority of goats marketed in South Africa are sold by private transactions in the informal market to be slaughtered for religious or traditional purposes. The result is that a very small percentage of goats are marketed through registered abattoirs. The informal market of goats, through traders and / or speculators, therefore drives the South African goat industry. The good prices for live goats, is one of the reasons why goat meat was not been sold commercially in South African retail stores before 2003.

An unfortunate aspect of the Indigenous goat industry is that it is not organised in the form of provincial and national structures. The Working Group could not find any representative structures in the Indigenous goat industry. There are however several initiatives which aim to provide the organizational, institutional and infrastructural framework within which emerging farmers will more readily be able to market their goats in an organised manner. The opinion is that a non-profit making representative institution that accepts their social responsibility, could help black farmers to improve the quantity and quality of their produce through functions like information gathering and dissemination, extension services and training, research, strategy formulation, promotion, etc. This could also serve as a vehicle where the private sector and public sector could liaise with each other.

An important aspect that prevents the growth in the Indigenous goat industry is that goats are mainly "kept" by farmers and its commercial

value is not optimized as could be found in a well-managed commercial farming system. The opinion in some circles is that black farmers do not see goats as a saleable commodity. They see them as animals for financial security and only old animals are sold which led to the bad image of goat meat. To commercialise the goat industry means that farmers must see their goats as a source of income. In other words, black farmers must be convinced that they could make money from goats.

The biggest advantage of the Indigenous goat is its resistance to diseases and its adaptability in unfavourable grazing circumstances. Because of their small size, adaptive feeding behaviour and low management, goats are a viable option in improving the household cash flow of rural people and resolve the issue of food security. Apart from cash income, goats could also be a valuable source of milk and meat for rural poor people. Goats can be kept on one acre of land or even less. It is much easier for small farmers with no land or only little land to farm with goats than with cattle, because 10 goats could be kept instead of one cattle.

In a South African context goat meat will always have to compete with beef, mutton, pork and poultry. However, goat meat contains less fat and cholesterol, and higher levels of protein and iron than most other types of meat. If these attributes could be promoted a huge marketing potential for goat meat could be created.

II RECOMMENDATIONS

The Working Group wants to make the following recommendations:

- 1. Existing efforts to commercialize the Indigenous goat industry should be supported by all directly affected groups. To develop the indigenous goat industry, it is important to embark on an educational approach and to explain the financial value of goats to the black farmers.
- 2. The goat industry should become actively involved and claim their benefits available through the proposed statutory measures to be promulgated for the red meat industry in the near future. Alternatively, the goat industry should break away from the red meat structures and establish its own structures.
- 3. Government as the central competent authority must be actively involved in the establishment of export protocols for Boer goat embryos to importing countries.
- 4. The health benefits of goat meat should be promoted to create a bigger demand for this product.
- 5. For the purpose of planning it is important to have accurate statistics on the number of goats and where they occur. The proposed statutory measures in the red meat industry could be of assistance in this regard.

1. INTRODUCTION

1.1 Background

The National Agricultural Marketing Council (NAMC) is a statutory body and primarily an advisory body for the Minister for Agriculture and Land Affairs. On 25 February 2003 the Council decided to establish a Working Group to conduct an investigation into the marketing potential for the South African goat industry. The Working Group held its first meeting on 7 July 2003.

1.2 <u>Composition of the NAMC Goat Working Group</u>

The Goat Working Group comprised of the following members:

Mr Winston Mvabaza (Chairperson)	NAMC Council Member
Mr Schalk Burger (Driver)	NAMC Secretariat
Mr Donald Mokoena	NAMC Secretariat

1.3 <u>Terms of reference</u>

It was decided that the Working Group would specifically look into the following issues (and it was accepted to be the framework for the final report):

- To study the current status of the South African goat industry.
- To identify structures in the South African goat industry (with a view to propose more effective structures)
- To assess the market potential for goats nationally and internationally
- To assess the level of participation of different groups in the South African goat industry
- To study the role of the goats in promoting food security
- To investigate current marketing arrangements for the South African goat industry
- To investigate the current status of data and industry information in the South African goat industry.

2. LITERATURE REVIEW (A WORLD PERSPECTIVE)

Introduction

The word "goat" is a common name for any of eight species of clovenhoofed, horned mammals closely related to the sheep. Mammals are described as those hairy, milk-producing, warm-blooded animals. Goats have highly developed nervous systems, and they show an intelligence and resourcefulness that few other species can match. That is why goats are also very much stress sensitive and must be handled accordingly. The goat is used for meat, as a milk producer, as a pet, and as a beast of burden. Many parts of the animal are economically valuable for a variety of purposes, such as the skins for leather and the pelts for rugs and robes.

There are numerous breeds within each type of goat.

Dairy goat breeds - Saanen, Toggenburg, Alpine, Nubian, LaMancha Meat goat breeds - Boer, Boer Cross, Spanish, Savanna, Kalahari Red Fibre goat breeds - Angora, Cashmere, Spanish Other goat breeds - Pygmy, Highland, Nigerian Dwarf

A world overview

In 2004 the total goat stock numbers in the world reached 767 931 000 (source: FAOSTAT). According to FAOSTAT approximately 96% of all goats were found in developing countries while only 4% of goat numbers were found in developed countries. The Far East possessed approximately 56% of all goats in the world. Among the leading goat producing countries of the world is China with 23%, India with 16% and Pakistan with 7% of total goat numbers. A snapshot of world goat numbers is as follows:

172 921 000
124 500 000
52 800 000
34 500 000
26 000 000
18 511 000
223 466 000
22 068 000
1 230 000

An African perspective

In 2004 the total goat numbers in Africa stood at 223 466 000 which represents 29% of world goat numbers. The African countries with the highest goat populations are as follows:

	Goat number	Percentage
Sudan	40 000 000	18%
Nigeria	27 000 000	12%
Tanzania	12 556 000	6%
Mali	11 464 000	5%
Kenya	11 000 000	5%
South Africa	6 850 000	3%

As can be seen from the above figures, South Africa is a relative small role-player in Africa when it comes to goat numbers. In 2003 South Africa possessed only 3% of Africa's goat numbers and less than 1% of the world's goat number. Sudan is the biggest country in Africa and has 8% of the land available in Africa. In terms of land available, South Africa is the ninth biggest country in Africa (4% of the land).

Goat meat versus other meat on the world market

In 2004 total world meat production was calculated at 253 528 000 metric ton. A breakdown of meat production figures was as follows:

	Metric ton	Percentage
Beef and veal	58 922 239	23%
Mutton and lamb	8 025 027	3%
Goat meat	4 198 885	2%
Pork	98 506 662	39%
Chicken meat	65 014 504	26%
Other	18 860 683	7%

Virtually all of the world's major cultures have a historical association with goats and goat meat (chevon). Goat meat is arguably the most widely accepted red meat in the world having none of the taboos associated with some other meat products, such as for instance, beef and pork have among the Hindu and Muslim faiths respectively.

The goat meat industry is largely built around ethnic demand and social traditions for the product. For example, during the "Hajj", a Muslim feast in March each year, approximately 34 million sheep and goats being slaughtered in Arabic countries. This number is being slaughtered within six hours and all being done outside an abattoir. They sacrifice these animals in remembrance of Abraham's readiness to sacrifice his son to God, as the Islamic world marked the first day of the Eid Al-Adha feast of sacrifice.

Goats - an asset for developing countries

The world sheep population is currently more than 1 100 million and that of goats is rapidly approaching 800 million. However, it is important to note that goat numbers are increasing much faster in developing countries than in developed countries. For example, goat numbers in the USA went dawn from 2 572 000 in 1970 to 1 200 000 in 2003 (a decrease of 53% over this period) while goat numbers in Africa increased from 113 600 000 to 223 500 000 over the same period (an increase of 97%). This may be explained by the ability of small ruminants to survive and produce in harsh environments on low-cost feeds; their particular adaptability to arid conditions; their suitability for the small, capital-scarce family farms in developing countries and smaller available land area per livestock owner.

Goats are particularly valuable in developing countries because of their ability to utilise scarce grazing and tolerate unfavourable climates. Their numbers are increasing in these countries but corresponding increases in productivity have not, in general, taken place. FAO's activities with small ruminants (sheep and goats) aim to help the small farmer or stockowner in these countries to improve production, resulting in greater availability of protein and higher income. Emphasis is being given to the improvement of indigenous production systems and to breeds within their own environments.

Goat numbers also increased much faster than other red meat species the past three decades. The past 33 years (from 1970 until 2003) world goat numbers increased with 104%, world cattle numbers increased with 27%, sheep numbers decreased with 3% while pig numbers increased with 75%. It means that goat meat became more popular that other red meat. On the contrary, world chicken numbers increased with 218% over the same period.

Another important aspect is that approximately 96% of world goats are owned by the poor but if traded, consumed by the developed countries due to its superior quality of goat meat and milk. If productivity in production systems could be improved in developing countries, goat production could be a major earner of foreign income for these countries.

The future goat production looks bright due to the increase in goat numbers and the acceptance of goat products in developed countries due to its superior health qualities.

Export of Boer goats for breeding purposes

Boer goats are very adaptable on extensive grazing and intensive pastures throughout the world. Over the past ten years, the South African Ennobled Boer goat has been introduced across the world. Boer goats were mainly exported for breeding purposes.

i) United states of America (USA)

In 1993 the South African Boer Goat was exported to the United States *via* New Zealand. The American Boer Goat Association registry was formed in June 1993 to record and certify the relative breed purity of Boer goat and Boer cross goats in the United States.

In the nineties the trend of buying and raising Boer goats in the USA were very much alike compared to ostrich production several years ago hobbyist. There was only one thing similar to the different animals. Prices were very high when both species were initially introduced into the USA. Big profits were made initially before prices started to drop. The simple reason for those high prices was because of the low number of animals available in the USA and the difficulty in getting them here. Getting into the goat business has since become much more affordable than a few years ago, when top bucks were fetching prices of \$40,000 to \$60,000. Does were being sold for about half as much. Unscrupulous marketing by racketeers pushed prices very high. The result was another pyramid scheme until breeding is done on basic farming principles. Currently top show-quality animals can be purchased for \$4,000 to \$6,000. Some fullbred Boer goats can be obtained for \$500 or less. The market has levelled off, but not the growth. "The Boer goat is the Arnold Schwarzenegger of the meat-goat world," according to a member of the American Boer Goat Association. A few years ago it used to take a year to 18 months to bring a goat to market. Now they can go to market faster - in six to eight months and the result is a better-tasting, less goaty goat.

The demand for chevon in the United States has increased in recent years (Glimp, 1995). Chevon is particularly attractive to a health conscious American consumer due to its lower fat content compared to other types of red meat.

The United States is only producing about a third of their domestic demand for goat meat. The establishment of United States Agriculture Department (USDA) standards for grading and cutting of goat carcasses were only adopted in 2002. It is believed that this could do much to promote the demand for goat meat. The opinion is that many major

markets might be more inclined to order goat meat if there are standards for cuts and grades. The USDA confirmed the fact that goat meat has half the calories of beef, about a sixth as many fat grams and the same amount of protein. Pound for pound, it has about the same calories as chicken, with one-fourth less fat.

ii) Australia

Boer Goat genetics were also imported into Australia in the late 1980's and were released from Quarantine in the mid 90's. Since this time the popularity of the Boer goat has gone from strength to strength with numbers rapidly increasing. Australia has a feral goat production of 4 - 5 million goats and is the largest goat meat export industry in the world. With Australia producing over 50% of world goat meat exports the numbers of Boer goats in Australia continues to rise as farmers and graziers turn to goat meat production as a profitable alternative enterprise.

Australia is currently the world's largest exporter of goat meat to around 25 overseas destinations. In an industry first, Australia developed a totally integrated process to automate the de-hairing of goats and as a result improve the quality of the product for markets that require skin-on carcasses.

Boer goat bucks are being used to crossbreed with Australian feral does producing a much faster growing animal, which reaches slaughter weight in significantly faster time and has a higher dressing percentage. The Boer goat has also performed extremely well in trials and carcass competitions proving it to be the superior meat goat breed. On the negative side, Boer goats are not such good mothers that prevented that they are in bigger demand in Australia. Especially just after birth, Boer goats need a lot of assistance to raise their kids. It is ideal to keep does and kids in a kraal for a few weeks.

iii) Other countries

The Boer goat breed has been made a significant contribution in crossbreeding programmes since their introduction to China in 1995, particularly in terms of improving meat quality and body weight of their indigenous goats (Nanjiang Yellow). The potential exists that Boer goats and Boer goat embryos could be exported to other countries such as Brazil, Canada and the Middle East.

3. HISTORIC OVERVIEW OF THE SOUTH AFRICAN GOAT INDUSTRY

As indicated earlier, this study covers three types of goats, namely the Boer goat, the Angora goat and the Indigenous goat. The histories in the relevant industries are as follows:

Historic overview of the Boer goat industry

The Ennobled Boer Goat originated in the Eastern Cape Province of South Africa from the early 1900's when some farmers began selecting indigenous and crossbred goats for meat production. Boer goats were selected for adaptability, carcass quality, excellent conformation and distinctive red head and white body.

The Boer goat name is derived from the Dutch word "Boer" meaning farmer and was probably used to distinguish the farm goat from the Angora goat which was imported into South Africa in the 19th Century. The Boer goat is therefore an indigenous breed to South Africa. It is the only goat breed that has been specifically bred for meat and is recognised as the world's premiere meat goat.

The South African Boer Goat Breeders' Association was founded on 4 July 1959 and one of its first tasks was to establish standards for the emerging breed. Since 1970 the Boer goat has been incorporated into the National Mutton Sheep and Goat Performance testing scheme, which makes the Boer goat the only known goat breed involved in a performance test for meat production.

Boer goats are very adaptable and are one of the most sought after goat breeds in the world. Since the early 1990's, the South African Boer Goat has been introduced across the world. The demand for this animal is growing annually, limited only by the absence of export protocals to importing countries, the number of animals available for export, available quarantine infrastructure and the occurrence of diseases such as Blue tonque and Foot-and-Mouth which limits South Africa's access to some export markets. During 2000 to early 2002, Boer goat animals and embryo exports were stopped due to the Foot-and-Mouth disease outbreak of 2000 but have resumed since 2002.

Boer goat embryo export has been more widely practised in South Africa, with indications that this trade will increase considerably in the future. In 1995 only 269 embryos were exported but it increased to 3 699 in 1997. In 1997 the total export value of Boer goat embryos was approximately R9.2 million. China has a potential market for approximately 100 000 Boer goat

embryos, at USA \$100 per embryo. Today, the potential Boer goat embryo market in China alone is worth a potential R100 million, and interest from Australia, New Zealand, Canada and the United States being similarly strong.

The export of live goats (Boer goats) is practised on a much smaller scale. Until 2002 less than 1 000 Boer goats were exported live.

It is believed that the Boer goat will have a significant effect on the quantity and quality of goat meat produced in the world because of its outstanding conformation and muscling.

Historic overview of the Angora goat industry

In 1837 a South African delegation managed to persuade the Turkish authorities to allow them to import two Angora rams and a ewe to establish the mohair industry in South Africa. When the goats arrived it was discovered that the rams had been castrated in an attempt to prevent the development of a rival market - but fortunately the ewe was pregnant with a male kid, a precarious start to business. Over an extended period more goats were imported. It was from this humble beginning of three breeding animals that South African mohair has become sought after worldwide.

Since 1894, a scientific breeding approach has been in place, which has transformed the original Turkish Angora goat into a hardy animal strong enough to thrive in the harsh, scrubby conditions of the Karoo as well as an animal free from "kemp". (kemp is the foreign fibre caused by crossbreeding which, if processed into the final product, does not take dye and causes the "prickle" consumers abhor). This makes the Angora goat unique to South Africa.

By the turn of the century mohair production was high - three times its current level. World demand for mohair has always depended on fashion changing supply and demand created huge fluctuations in prices, seriously affecting producers.

Mohair production has shown a steady decline over the past ten years or more. Much debate has taken place on the reasons for that decline. World mohair production decreased from 26 million kilograms in 1988 to 6.6 million kilograms in 2004. In South Africa mohair production decreased from 12.2 million kilograms to 3.95 million kilograms over the same period. At first glance the reasons are not all that clear. The following may have had a major influence:

- International subsidies during the eighties, especially in the USA, and controlled single-channel marketing in South Africa created a situation where mohair, widely regarded as a speciality and noble fibre, became a relatively inexpensive commodity competing with less sophisticated natural fibres and synthetic fibres.
- Stockpiling during the late eighties and early nineties had a dampening effect on fibre prices (especially for wool and mohair) and put tremendous pressure on profitability causing large numbers of growers, both in South Africa and abroad, to look at other alternatives to make planning and budgeting less complicated.
- The ever-increasing market need for finer and lighter fibres put most natural animal fibres at a huge disadvantage, as breeding to meet these needs is a long-term process.
- The perception that mohair products, including clothes, are very expensive contributed to this situation.
- The instability of the price for mohair, which remains volatile as manufacturers link the product to fashion trends.

In 2004 South Africa produced 60% of world mohair production, the USA produced 14% of production and Lesotho was the third biggest producer in the world with 7%. All Lesotho mohair is marketed through South African structures. Total production value of South African mohair was approximately R150 million. The production was 3,95 million kg mohair at an average price of R37.91/kg.

Mohair is stringently graded on the farms - it is this dedication to the fibre that sets South African mohair apart from other producing countries. Extremely rigorous quality control; high standards in the production and later in the processing and manufacturing spheres; creative marketing strategies and a swing towards natural fibres have brought South African mohair back to prominence in the world markets.

Historic overview of the Indigenous goat industry

When Jan van Riebeeck, founder of the western civilization, landed at the "Cape of storms" in 1652, the Khoi people with their goats were present. Van Riebeeck was so delighted that there was goat meat that he changed the name to "Cape of Good Hope".

"Indigenous goat" is the collective term used for all varieties of South African goat breeds. Special breed names are usually given according to the geographical area in which they occur, or names of breeds and types

are taken over from the nations or tribes that own them. Indigenous goats of South Africa can be classified into speckled goats, Loskop South indigenous goats, KwaZulu-Natal goats, Nguni goats and the Delfzijl goats (Roets, 2004). However this classification system does not accommodate the thousands of indigenous goats found outside these specific locations throughout South Africa.

The Indigenous goats of South Africa vary in horn and coat type, colour, ear length and size. They are mostly of medium size. Environmental extremes are mainly responsible for the variation in size between goat types. It is possible to find different variations in the same region and even in the same flock.

Indigenous goats have never been subjected to any selection other than survival in nature. They have never received special care, and the management practices involve being milked (by some cultures) and kraaled at knight. These goats are kept in the kraals until very late the next morning. They are known to be extremely hardy, have survived centuries of periodic droughts and harsh temperature extremes. They also have the reputation of being resistant to the majority of tropical diseases and parasites.

FRAMEWORK FOR INVESTIGATION

The terms of reference adopted for this study formed the framework for this investigation.

4.1 THE CURRENT STATUS OF THE SOUTH AFRICAN GOAT INDUSTRY

Introduction

The Boer Goat, Savanna and Kalahari Red are currently recognized as commercial goat breeds for the production of meat and skins. Commercial goat milk production is limited to the Saanen and Toggenburg, while the Angora goat produces mohair. Indigenous goats refer to various goat types that are in the hands of small-scale producers and contribute primarily to family needs for meat and skins and to a lesser extent for milk, depending on the prejudices of the community.

South Africa has currently approximately 6.850 million goats. The provincial numbers are estimated as follows:

Eastern Cape	3 200 000	(46.7%)
Limpopo	1 000 000	(14.6%)
KwaZulu-Natal	900 000	(13.1%)
North West	771 000	(11.3%)
Northern Cape	513 000	(7.5%)
Western Cape	256 000	(3.7%)
Mpumalanga	100 000	(1.5%)
Free State	90 000	(1.3%)
Gauteng	9 000	(0.1%)

Goats are mostly slaughtered for religious or traditional purposes and on an informal basis (backyard slaughter). The result is that less than 0.5% of goats are slaughtered in registered abattoirs. In other words, goats are slaughtered in a specific way for bridal ceremonies and the eating of the meat is restricted to certain persons according to the custom of the families. Goats are also important in burial rituals by Sangomas where they have to suck the blood and wear the gall bladder as a headdress.

Farming with goats are often an important tool for range management (bush encroachment control) and weed control. The major benefits of using goats for weed control include:

reduced use of chemicals increased use of all herbage

increase animal production improved carrying capacity reduce fire risks

Breeds and production

The <u>Boer goat</u> originated from South Africa and is world wide sought after for its healthy meat. Goat meat is low in cholesterol and fat but high in protein.

Characteristics for a Boer goat are its large size, short white hair, red markings on the head and neck, uniform carcass, fast growth rate, long breeding season, good browser, good milker and profitable for meat production. Because of its large frame and faster growth rate, it will need more nutrients than other indigenous goat breeds to maintain and support an optimum growth rate. Therefore, Boer goats may not be suitable for all ecosystems or affordable by all producers.

In the late eighties and early nineties the Boer goat embryos were exported to developed countries at exceptional high prices. In this regard the Boer goat followed very much the same pattern as ostriches before the ostrich industry was deregulated in 1990.

The Boer goat is being used very effectively in combination with cattle due to its preference to browse and the resulting limited impact on the grass cover. The Boer goat has an extended breeding season making possible 3 kiddings every 2 years. Boer goats have to kid in a kraal to ensure that the does are there to feed their kids (is known for its poor mothering capabilities). This makes the Boer goat very much labour intensive and management skills must be capable to handle this requirement.

South Africa has approximately 60% of the market share of Boer goats in the world. Other major Boer goat producing countries are the USA and Australia.

Another variety of a domesticated goat, important for its commercial value, is the <u>Angora goat</u>. The Angora goat is covered, except for the face and the legs below the knees, with long, fine, silky hair called mohair. The brilliant, transparent texture of mohair has made it a valued material.

The so-called white commercial farmer mainly owns the Angora goat. It is however interesting to note that Lesotho, a small independent country in Africa (with only 2.5% of the area of South Africa), is the third biggest mohair producer in the world. All Lesotho mohair is marketed through South African structures.

South Africa currently produces more than 60% of total world mohair production. Since the early nineties, South Africa has become the only reliable source for quality mohair in the world.

The so-called <u>Indigenous goat</u> is largely owned by black producers who often keep these animals on communal land. Indigenous goats represent approximately 63% of the goats found in South Africa. Indigenous goats were in the past not subjected to any selection process, un-improved and are a crossbreeding of the improved goats like the Boer goat, the Kalahari Red, the Savanna goat, etc.

Indigenous goats have a considerable potential provided that proper management is employed and that their potential in terms of valuable and productive stock is recognized. In rural areas, goats are to a large extent for subsistence, with low productivity and poor management. An important aspect that limiting the commercialization of indigenous goats is that goats are mainly "kept" by farmers and its commercial value is not optimized as could be found in a well-managed commercial farming system.

The Indigenous goat is mainly found in the Eastern Cape Province (in the former Transkei and Ciskei), but also in the Limpopo-, North West- and Kwazulu-Natal Provinces (with small numbers in the other Provinces of South Africa). The Indigenous goat is neither regarded as a meat goat (due to its small carcass) nor it is regarded as a milk goat (because it gives barely enough milk to provide for the needs of their kids). The biggest advantage of the Indigenous goat is its resistance to diseases and its adaptability in unfavourable grazing circumstances. An unfortunate aspect of the indigenous goat industry is that it is not organised in the form of provincial and national structures. Nevertheless, a very effective marketing system with the assistance of traders / speculators for Indigenous goats has developed over many years. Due to the demand for goats in the informal market and the shortage of animals, farmers are getting good prices for their animals.

Potential limitations to goat production

Goat production is subjected to a number of potential limitations including prejudice, disturbing the ecological balance, marketing and consumer preferences. Prejudice against goats can be traced to the Old Testament of the Bible where the Israelites had to load their sins on a goat and drive it into the desert. In Europe it was common to keep a goat in the cattle and horse barns to attract disease and evil in order to keep it away from the other stock.

Until recently, in Southern Africa there has been an official bias against the goat as a destroyer of vegetation. Because of this prejudice, efforts to

exploit the full potential of this animal have been generally minimal, compared to efforts in sheep and cattle industries.

Goats are described as the most versatile of all ruminants in terms of their feeding behaviour and they are well adapted to relatively harsh environments. It is however also indicated that goats, through the centuries, contributed to the expansion of desert areas in the Sahara and Middle East. Goats are opportunistic grazers and tend to select the most palatable and nutritious forage available. They could therefore contribute to overgrazing if not properly managed.

Despite certain favourable carcass characteristics such as lower fat percentage compared to beef and mutton, as well as favourable meat to bone ratio, per capita goat meat consumption in South Africa is low compared to other red meat types. Goat meat seemed to be preferred by a few specific communities in South Africa, but generally has a hard time competing for a market share. It has received little attention in terms of marketing and unfortunately has a negative connection of an undesirable odour. Indications are that the "undesirable odour" only refers to the elderly bucks.

Commercialisation of the Indigenous goat industry

In terms of the rural goat populations, there are certain challenges and some of them were identified in the process of commercialising this sector in the last few years. The areas for investigation included –

- □ Improvement of small-farming systems
- Evaluation of nutritional status
- Generic identification of local populations

It is important to accept that assistance to promote goat production may differ from commercial goat production versus smallholder agriculture. Role-players should also take the cultural role of the goat into consideration when designing projects.

4.2 CURRENT STRUCTURES IN THE SOUTH AFRICAN GOAT INDUSTRY

Introduction

For many decades goats and goat products were and still are regarded as part of the South African red meat industry (together with cattle, sheep and pigs). The former Meat Board was established in 1934 to administer the Meat Scheme. The Meat Scheme was introduced to create order and stability in the livestock industry after the serious drought and depression in 1933. The Meat Scheme was applicable on cattle, sheep, goats and pigs.

Due to the fact that only a small percentage of goats are slaughtered at registered red meat abattoirs, the goat industry did not get much attention within the established structures of the South African red meat industry. In spite of the relatively large population of goats (almost 7 million goats) as opposed to approximately 24 million sheep, the goat's contribution to the formal slaughter industry is insignificant. The reason being that only 0.5% of goats that are slaughtered, go through registered abattoirs.

The promulgation of the Marketing of Agricultural Products Act, 1996, necessitates the closure of all agricultural control boards, including the Meat Board. The Meat Board stopped all its activities by the end of November 1997 and the Meat Scheme was repealed by the end of July 2004 after all the outstanding issues of the former Meat Board were addressed.

<u>SAMIC</u>

In 1998 the South African Meat Industry Company (SAMIC), a section 21 company was established to perform some of the functions that were previously performed by the former Meat Board. SAMIC regards itself as the custodian for the South African red meat industry (with a focus on cattle, sheep, goats and pigs).

In January 2004 the Meat Industry Forum (MIF) applied to the Minister for the promulgation of statutory levies, compulsory registration of certain role-players and the compulsory furnishing of records & returns by identified role-players on all the species in the red meat industry (sheep and goats to be levied in the same manner). The proposed statutory levies would only be levied on animals that are slaughtered in registered abattoirs. The majority of goats slaughtered in South Africa will therefore not be subjected to a statutory levy. The levy on red meat will be used to fund expenditure relating to product research, information, transformation,

promotion and consumer assurance. Most of these functions will be provided by SAMIC. In practice it would mean that the goat industry could approach SAMC / MIF to perform / finance some of the functions that are so much needed in the goat industry. The application for services / funds would obviously be limited to the amount that is collected from goats and goat products.

Apart from SAMIC (the umbrella organisation for the South African red meat industry), each sector of the different types of goats has its own structures to perform the functions that are deemed necessary for that particular group of farmers.

Boer goat structure

The South African Boer Goat Breeders' Association (SABGBA) was established in 1959 to improve and protect the interests of the Boer goat farmers and to introduce a uniform breeding policy and selection criteria.

The aims of the SABGBA are to:

- Improve the Boer goats in South Africa
- Provide secretarial services for the SABGBA
- Conduct courses and train judges and inspectors
- Disperse knowledge with respect to the breed
- Provide inspection services for classing and inspection of flocks
- Organise a South African Championship Show in order to show the best quality Boer goats available in South Africa
- Improve the grading system of Boer goat meat
- Staging of auctions and inspection of animal offered on auctions

Mohair (Angora goat) structures

The Angora goat industry is the best equipped with structures, if compared to the Boer goat and Indigenous goat industries. The roles, which the Marketing Act and the Co-operatives Act had played after 1933 (drought and depression) to organise and to develop the agricultural sector, could not be under-estimated. The 1937 Marketing Act established a system whereby control boards had all the necessary powers (subject to the approval of the Minister of Agriculture) to control the marketing of most agricultural products. Agricultural control boards were established to regulate the marketing of agricultural products (e.g. the Mohair Board regulated the marketing of mohair through the administration of a single channel pool system).

The MAP Act 1996 also requires the closure of the Mohair Board. In 1997, with the demise of the former Mohair Board, two new institutions were established, namely the Mohair Trust and secondly Mohair South Africa, which is a Section 21 Company. Mohair South Africa, continued with some of the functions that were previously performed by the Mohair Board. A third institution, namely Mohair Pools, was established to administer a voluntary pool system for mohair (with funds from the Mohair Trust).

Until 1997 the Mohair Board administered the marketing arrangements for mohair. The assets of the former Mohair Board (approximately R112 million) were transferred (with the approval of the Minister for Agriculture and Land Affairs) to the Mohair Trust. The Minister also approved the Deed of Trust of the Mohair Trust. The Deed of Trust makes provision for seven Trustees of whom the Minister could appoint one Trustee. The Mohair Trust and the Wool Trust (both has only one ministerial representative) were the first two trusts that were established to receive assets from former control Boards. All the other agricultural trusts (who received funds from the former control boards) were established with a 50% / 50% representation, for example, three representatives from the industry and three ministerial appointed trustees.

Other structures in the Angora goat industry include the Mohair Growers Association, Mohair Brokers Association, Angora Goat Breeders Association and the Shearers Association.

Indigenous goat structures

The Working Group could not find any representative structures in the Indigenous goat industry. This however does not imply that the industry is completely unorganised. Through the years a well-developed marketing system had been established with the assistance of speculators / traders.

There are however several initiatives occurring in the Eastern Cape, Limpopo, North West and Northern Cape Provinces which aim to provide the organizational, institutional and infrastructural framework within which emerging farmers will more readily be able to market their goats in an organised manner.

This proposed organisational structure is based on the formation of cooperatives at village and regional level. Farmers form groups (goat interest groups) with neighbours in their areas. These groups are assisted by Regional Officers and the Institutional Development Division of the National Department of Agriculture to develop co-operatives. Goat farmers are assisted in developing their own co-operative names, membership, constitution, and elected leadership. Structures like co-operatives could play an important role to promote collective buying in order to create

critical mass. All goat producers and goat product processors are eligible for shares in these initiatives and through these may earn dividends based on profit-sharing to the value-adding done throughout the organisation.

Once formed, the co-operatives at village level are organised into regional groupings, and become members of these regional co-operatives. Umzimvubu Goats, Picardy goats and the Oliver Tambo Projects, all in the Eastern Cape, are organised along these lines, and are being assisted with collection and transport infrastructure to allow for collection of goats from village-level farmer co-operatives.

In the Northern Cape, regional offices are being created to assist with collection and transport to central infrastructures. Thus far these "hubs" are private individuals/entrepreneurs, and thus also encompass an element of job-creation. Over 90 goat co-operatives are currently being formed in the Northern Cape.

This system allows for traceability in all the product lines, and a planned and organised acquisition of goats and goat products from emerging farmers and processing entrepreneurs. A requirement for traceability is a comprehensive system and infrastructure for individual identification and movement of animals. Traceability must allow for ear-tagging, cooperative branding, members with membership cards and numbers, etc.

Other initiatives aiming to establish marketing structures for Indigenous goats include the following:

i) Kalahari Kid Corporation

The Kalahari Kid Corporation is a joint initiative between private sector, the Northern Cape Provincial Government and emerging farmers in the Northern and Eastern Cape and the North West Province of South Africa. This business facilitates the upliftment of communities and poverty alleviation through job creation.

Kalahari Kid has contract growers (farmers who farm with goats, solely for resale to the Kalahari Kid Corporation). Extension officers are constantly monitoring the quality of animals. This is necessary in order to do proper planning to market the end product. The Corporation also sources the goats for slaughter, consolidates them in groups and sends them to one of three nominated abattoirs situated in Groblershoop, Colesburg and Port Elizabeth. It is important for the Corporation to get critical mass for its marketing campaign.

Kalahari Kid Corporation is also marketing goat meat and value added products to both local and international markets.

ii) Umzimvubu Goats

This goat project is the most advanced and started in September 2000. The Umzimvubu Goat Production and Processing facility entails the construction of infrastructure and the training and organisation of goat owners/farmers in the Alfred Nzo district of the Eastern Cape Province. The infrastructure will consist of a feedlot, abattoir, tannery, restaurant, curio shop and leather craft workshop. This infrastructure that produces a varied range of products, is aimed at the retail and tourism markets. All the raw products will be sourced from goats owned by \pm 3 200 small-scale rural farmers in the Alfred Nzo District. These farmers are organised into 6 district co-operatives with the assistance of social facilities internal to this project. They facilitate group formation, and goat management training is provided with PAETA & MQA funding. The project is managed and directed by the LED Division of the Alfred Nzo District Municipality.

PAETA – Primary Agriculture Education and Training Authority MQA – Mining Qualifications Authority LED – Local Economic Development

The unit will be situated in Mount Ayliff on land owned by the Umzimvubu Local Municipality, with access to existing water, electricity and road infrastructure. The facility started to operate in September 2004. Goat farmers are represented at all levels of the organizational structure.

Funding was received through the Local Economic Development Fund and the Integrated Sustainable Rural Development Programme.

iii) Kgalagadi Dipudi – Cross-border Project - Northern Cape/North West Province

The facilitation of this project started in December 2001. The Kgalagadi Dipudi Project involves the formation of Goat Interest Groups, and the training and facilitation of these groups by a group of extension officers from the Northern Cape and North West Province and officers of the Northern Cape Office of the Status of Women known as Metswedi (the fountain). Leather crafting groups have been identified, and have undergone training in leather crafting; training in goat management is ongoing. There are currently 43 goat interest groups and they have successfully organised themselves into a cooperative known as the Kgalagadi Dipudi Enterprise (KDE). Of the 400 farmers, 7 have been elected onto the KDE board, with 200 elected council members. To date, council and board members have undergone a 2-day business plan development workshop, where they were able to give their inputs regarding the planning and execution of the project.

A national representative structure for the Indigenous goat industry

A possible reason why there are no formal structures, or national representative structure for the Indigenous goat industry, might be that there is no need for it, because all of their goats are sold to speculators or out of hand sales. The Indigenous goat industry has therefore a reliable market for their produce. Furthermore, the South African goat industry is not in a position to supply in the local demand for goats, because approximately 250 000 goats are imported from Namibia on an annual basis to make up for the shortage that is experienced on the local market.

A national representative organization is however necessary to perform certain functions e.g. information gathering and dissemination, extension services and training, export control (not to compete with each other in the foreign market), research, strategy formulation, promotion, etc. This could also serve as a vehicle where private sector and public sector could liaise with each other. This body however needs funds to finance these functions. The Marketing of Agricultural Products Act, 1996, could be used to assist in the providing of some of the functions.

To leave an industry completely in the hands of the private sector might be a wrong approach. The ideal would be to facilitate the market forces to drive the goat industry. Not to be too prescriptive but to create an enabling environment. The private sector would only become and stay involved if the return on their investment is attractive. But to stabilize the goat industry, one needs a non-profit making representative institution that accepts their social responsibility.

In order for the Indigenous goat industry to unlock its true potential it is necessary for them to get a national representative body to look *inter alia* to the following:

- Clear direction
- Effective organization
- Effective planning
- Implementation of strategies
- Execution of programmes
- Collaboration of research projects
- Intellectual property rights
- Promotion campaigns
- Statistics
- Collection of funds
- Coordination of extension services and training

Conclusion

It is important to implement a representative structure in the Indigenous goat industry to enable the industry to grow, to realize its full income potential and to put the industry on the path of commercialization. The commercialization of indigenous goats in South Africa must be seen as an opportunity to create jobs and to increase income in rural areas.

The opinion is that the current marketing methods in the goat industry is working good, but the quality of the products could be improved through various services, including training, extension services, etc.

4.3 THE MARKETING POTENTIAL FOR GOATS AND GOAT PRODUCTS

Introduction

The purpose of this section is to look into the potential of different goat products and the marketing potential for goats on the local and international markets.

In a South African context goat meat will always have to compete with the beef, mutton, pork and poultry industries when traded in the formal market. It is therefore important to identify a specific niche for the goat meat and marketing programmes should be directed towards the aspects desired by the different markets and consumers.

Health benefits of goat meat

The health benefits of goat meat (chevon) have only recently been realised. Until 2003 goat meat was not available in our retail stores. This was mainly due to the strong and well-developed informal market for goats (for ritual and religion purposes) with the result that a small percentage of goats are slaughtered in registered abattoir, the supplier of meat to the retail sector.

The nutritional value and other qualities of goat meat, vary between the different goat types. In general, goat meat contains less fat and cholesterol, but higher levels of protein and iron than most other red meats.

The following Table provides the chemical composition of goat meat compared to other species (per 100g):

Specie	Energy Kkal	Fat (%)	Protein (%)	Iron (mg)	Cholesterol (mg)
Goat	144	3,0	27,1	3,8	67
Beef	288	18,8	27,1	3,0	86
Pork	364	28,2	24,7	1,1	86
Lamb	276	18,87	25,9	1,6	99
Chicken	190	7,4	24,7	1,2	89
Turkey	170	5,0	29,3	1,8	76
Ostrich	142	2,8	26,9	3,2	83
Veal	158	3,2	30,2	4,5	112

Research done by Dr Vlok Ferreira, Department of Animal Science, University of Stellenbosch

Aversion to goat meat

Research also shown that chevon is lower in tenderness and flavour compared to lamb, beef or pork. Developing value-added products using chevon may mask its bad characteristic of texture and flavour, thus widening the existing market and increasing the number of consumers benefited from this low-fat product. The possibility of value-added chevon products (biltong, dried sausage, chevon in combination with other meat in reconstituted products such as cabanossi) is large.

Approximately 65% of people who were interviewed in a recent study indicated that they do not prefer goat meat or that they will eat other meat if it is available. Reason why these people responded in this way include the following -

- Goat meat smells (the majority offered this reason); and
- Beef and mutton are more tasty
- Goat meat is only used during traditional ceremonies
- "You can't eat your pet"

The aversion to goat meat is often due to incorrect management principles being applied. Meat goats need to be well fed, correctly housed, males should be castrated, and animals should be slaughtered at the correct age. The perception is that only the too old animals are sold which led to the bad image of goat meat.

Demand for goat milk

Although milk goats like the Saanen and Toggenburg were not covered in this study, it was regarded as necessary to highlight the health qualities of goat milk.

Goat milk is well known internationally for its therapeutic properties. It is largely sought after for children suffering from cow's milk intolerance, and for the making of specialised quality cheeses. Unfortunately, commercial goat milk production is seasonal, because the dairy goat breeds were developed in countries with a large seasonal fluctuation in daylight. France and Switzerland are the world's leaders in the production and processing of goat milk.

Goat milk can be frozen to ensure a year round supply to the market. The problem is that South African goats do not produce an adequate volume of milk (does not have critical mass) to warrant the investment in freezing facilities. Currently, South Africa imports powdered goats' milk to meet the demand for goat milk out of season.

The milk goat also forms an integral part of the Heifer International Project, which will be discussed under the heading for "Food Security".

Goatskins

It is estimated that tanneries process less than 10% of goatskins available in South Africa. This is a huge loss to the country, and in particular to rural areas. The reason for the skins not being marketed and processed is that slaughtering is done in an informal manner for ritual and religion purposes and not done in abattoirs. Skins are therefore scattered all over the country and should be collected in order to create a larger pool. The subsequent collection of such skins is not economically viable at this stage. Because the slaughtering is done in remote areas and in low numbers (the skins also being damaged during the slaughtering process because "knipmesse" are used and not modern slaughtering methods), and damaged, the prices these skins are fetching is very low. The price for dry skins is approximately R4 per skin. The result is that a large percentage of skins are simply dumped.

The monetary value of goatskins and its added value could be calculated as follows:

•	A goat skin, properly flayed and cured	R4
•	After tanning (at a cost of R25) its value increases to	R40

• As finished leather craft items, the skin could be worth R400

A rough calculation indicated that the potential value of the goatskin industry (finished leather craft products) is about R280 million whilst only approximately R25 million is harvested currently (assumed that 10% of live goats being slaughtered per annum (700 000 goats x R400 per processed skin).

It might be argued that the real profit in the tanning of goatskins is going to the leather crafter. The South African tanning industry is operating in a monopolistic manner because there is only two buyers for these skins and they also determine the prices for these skins. This could be true but other benefits are that the producer is getting a market for its product and the tanning process created job opportunities. Healthy competition amongst various leather crafters could increase the price for this raw product. This segment of the local market certainly needs further investigation.

Currently the majority of goatskins being exported in raw form, in other words unprocessed skins. Needless to say but a huge potential is getting lost to export unprocessed skins. Processed goat leather could be used for a number of products, including car seats and gloves.

Goat fibers

Goat fibres refer to mohair and cashmere. Goat fibers have a very small world market share when it comes to producing end products. The market leaders are cotton (45%) and synthetics (50%) with wool only 3% and goat fibers (including mohair) with only 0.03%. The main problem being low prices which makes it unattractive to produce goat fibers and secondly the huge fluctuations in prices of the raw material. The demand of mohair is dictated by fashion trends.

South Africa produces approximately 60% of the world production of mohair. In the past Turkey and the USA (Taxes) made a major contribution towards mohair production but their production decreased to almost nothing. South African mohair is marketed on auctions and then it is subjected to early processing before it is exported. Japan, Italy and China are the major buyers of South African mohair. The micron for mohair varies from 25 micron for young goats to 40 micron for adult goats.

In January 2003 South Africa's biggest processor of mohair products, Cape Mohair, has become one of the latest companies to join the Proudly South African campaign.

Cashmere is sourced from Boer goats, but only small quantities are available in South Africa. It is very soft and varies from 9 to 15 microns. Approximately 85% of the world's production of cashmere is produced in China and Mongolia.

Imports of live goats

South Africa currently imports approximately 250 000 live goats from Namibia on an annual basis. These goats are marketed in Kwazulu-Natal Province. This indicates that the local demand for goats exceeds the supply and that there is a potential to increase local production because the market already exists.

The South African market demands a lighter goat with a carcass mass of approximately 15 kg and not a 30 kg goat (a typical matured Boer goat). That is the reason why Boer goats are marketed at a very early age. Sometimes, the market also demands a specific colour, for example a white goat.

The export market for goat meat

The Middle East could be a good market for SA goats, because their goat meat consumption being approximately 100 million goats per year. From

November 2002, goat meat exports (in carcass form) started to the Middle East. Since then goat carcasses were exported to nine Middle East countries. It was mainly indigenous goats (R7.50 – R8.50/kg live) that were exported because Boer goats (R9.50 – R12.50/kg live) were too expensive for these markets. The strong Rand resulted in exports to the Middle East being stopped.

One opinion is that South African goat meat could only be exported at commodity prices. That means goat meat must compete with other meat in an open market. Another opinion is that the South African goat industry should market its goat meat as a niche product and distinguish South African goat meat from other goat meats available around the world. The niche for South African goat meat exports could be vested in value-adding products like sausages, cabanossi's, etc. Value adding to goat meat and to market these products in the Middle East, has huge potential, but the market still need to be developed. In the process to promote goat meat in the export market, huge amounts of funds would be needed for the promotion campaign and the question is who would finance this expenditure. In the recent past the private sector paid the cost but the producer carried the burden (in the sense of lower prices for live goats).

Considering the above-mentioned, the export potential for goat meat is not so good, because the export market is prepared to pay "market related prices" for South African goats. The market related prices in export markets are much lower than what could be realized on the local market (for example in Kwazulu-Natal). Kalahari Kid made a loss in 2003 on the export market because they could only pay the South African producer R6/kg per live goat (also to make provision for their marketing costs) to be competitive in the export market.

Live goats are realising good prices in the informal market and that is why producers must consider supplying in our local demand before we should think of the export market. In other words the demand for goats is on our doorsteps provided that farmers could supply the goats. According to Mr Izak Voster, Chairperson of the South African Boer Goat Breeders Association, South Africa has not enough goats to justify an export marketing campaign based on volumes.

Export potential for embryo's

A real opportunity lies in the export of Boer goat embryos to a number of developed and developing countries. Today, the potential Boer goat embryo market in China alone is worth a potential R100 million, and interest from Australia, New Zealand, Canada, Fillipines and the United States being similarly strong. But due to the lack of export protocols to

these countries, SA could not supply them. The problem is now that Australia is exporting Boer goat embryos to China.

As a result of the large number of expensive veterinary testing of donor animals imposed in terms of the import protocols of importing countries, South African embryos cannot be produced at a price of lower than US \$180 per embryo. During the FMD period in South Africa countries like Australia and New Zealand established huge export markets for Boer goat embryo's in Asia and other South American countries. The prices of the embryos from these countries are much lower. Hence the export of South African embryos has decreased and it is difficult to reclaim the previous market share.

South African Boer goat breeders are set for an export boom if export protocols could be completed with overseas markets. South African veterinarians could however not answer questions related to "scrapie" and BSE and this was the reason why Canada repealed the previous protocols.

Promotion (consumer education) of goat products

It is often argued that the demand for goat meat in retail stores is poor due to poor marketing or no marketing at all. An aggressive marketing campaign for goat meat is a prerequisite for the further development of the goat industry. The marketing of ostrich meat in developed countries is a good example in this regard. Both types of meat could be regarded as healthy meat and be promoted as such. For many years the promotion of ostrich meat on the local market was neglected due to the fact that more than 90% of ostrich meat being exported to developed countries. But since the international market for ostrich meat is temporarily closed due to the outbreak of bird flu, the ostrich industry started (in 2004) to promote their product locally with great success.

There are many factors in favour of goat meat, but it needs to be promoted. In doing this, the subjective opinion of potential customers should be changed. For example, goat meat is 50 - 65% lower in fat than similarly prepared beef, and hence a higher percentage of protein content. Goat meat is also lower in fat than chicken, even with its skin removed. These factors however need to be promoted.

There are a number of reasons why goat meat was not previously promoted. The reasons could include the following:

□ Insufficient supply

The consumer demand for goat meat and milk may be increased through education, promotion and marketing

programmes. But before one could do that we need consistency in supply and quantity. The biggest problem is that South Africa has not sufficient supply of the raw product on a continuous basis. We eat it all and must import to satisfy local needs.

• Out of hand sales on farms

A further reason why promotion is not done is that almost all the goat sales are out of hand sales on farms. Farmers are realizing good prices through out of hand sales. They could argue why should they spend money to market their product while they have already a market for their goats?

Insufficient information

Another reason could be that there is not sufficient information available on the indigenous goat industry – what is the actual number of indigenous goats and where are the goats?

Animal keepers

Another problem is that black producers regarded their goats as financial security or wealth and therefore intend to keep their goats rather then sell it.

An extensive campaign to educate the consumer about goat meat was undertaken by a private company in 2004. Kalahari Kid succeeded by placing goat meat on the shelves of a number of supermarkets in South Africa (Pick & Pay, Checkers, Hypermarket and Spar). Consumers are made aware of the excellent qualities of goat meat. Shoprite Checkers is marketing goat meat, branded CHEVON and finding that the consumer approves. Goat meat is booming in the Western Cape. One of the large supermarket groups market high quality goat meat as a new health meat. Kalahari Kid market goat meat is totally natural with no growth hormones being used. The animals roam and graze freely and are marketed as all-natural South African goat products.

4.4 THE LEVEL OF PARTICIPATION OF THE DIFFERENT GROUPS IN THE SOUTH AFRICAN GOAT INDUSTRY

Introduction

White commercial farmers mainly own Boer goats and Angora goats while black farmers mainly own Indigenous goats in a communal farming system. Indigenous goats represent an important contributor towards the total goat population as it represents approximately 63 percent of the total goat population in South Africa. This is remarkable because commercial farmers occupying 86% of agricultural land and the remainder (14%) occupied by small-scale and subsistence farmers. Most of the small-scale and subsistence (communal) farmers are found in the former homelands areas. The areas are marginal for crop production as they are semi-arid to arid with only a small proportion of the land under some form of irrigation. Despite the aforementioned, the majority of the poor (72%) lives in these area. The large number of goats on a small area of land explain to a great extent why Indigenous goats are "under-performing".

Goats, like cattle, play an important role in the livelihood of rural people in communal farming systems. Indigenous goats constitute a valuable genetic resource because of their ability to adapt to harsh climatic conditions, better utilize the limited and often poor quality feed resources and their natural resistance to a range of diseases such as pulpy kidney, gall sickness and internal parasites. It is well established that goats can survive and indeed flourish in areas where cattle and sheep struggle to survive. Goats forage more widely and on a greater variety of foods and they have the ability to survive the seasonal droughts due to their ability to browse and are quite prolific under these extensive conditions.

A study titled "Factors affecting goat production in a communal farming system "

In 2000 a study was done regarding "Factors affecting goat production in a communal farming system in the Eastern Cape region of South Africa." The selected area was the Mgwalana district in the Eastern Cape and the reason for the study was to increase goat numbers as a means of controlling bush encroachment. The study revealed that in contrast to the commercial sector, goats have a specific role in communal livestock systems that are not necessarily related to the generation of cash income. The main reasons given for keeping goats were for slaughtering during traditional ceremonies (35%) and cash sales (23%). Sales took place mainly during the summer months and buyers used the goats mainly for traditional ceremonies, funerals and weddings. Goat sales took place on
an informal basis, and no goats were sold by auction, or to abattoirs or butchers. The majority of adult goats were sold for relatively good prices (between R300 and R400 in 1996). If a customer is in desperate need, prices could go up to R1 200 in 2004. Only 15% of the respondents kept goats for home meat consumption. The peak marketing months for goats are in April (Easter), June-July (puberty ceremonies) and December (Christmas).

Respondents in the area were also asked to rank various types of meat, including fish, with regard to how frequently they would like to consume it. They indicated a preference for mutton and poultry, while fish and goat meat were the least popular choices. The reason for discriminating against goat meat was attributed to its taste and smell. The latter probably due to the slaughtering of bucks and old animals.

Respondents were also asked about their preferred livestock enterprise. Sheep farming was the most preferred livestock enterprise, followed by dairy and beef. The preference for sheep farming may be attributed to the fact that sheep are more docile than goats and can be herded together with cattle. The lack of enthusiasm for investing in goats appears to originate from the perception that goats are difficult to manage. When farmers were asked to identify the major constraint pertaining to goat farming, the majority of replies related to managerial difficulties (goats were perceived as being hard to manage and were characterized as "naughty", "wild", "greedy" and "unmanageable").

This study also looked into the different farming systems practiced in South Africa and why the one is outperforming the other. One reason for this is the motivation why particular farmers are keeping goats. In the case of communal farmers issues such as increased numbers were much more important than individual animal performances.

Different farming systems

There exists a dichotomy in farming systems in South Africa, namely communal and commercial farming systems. Farmers in the communal system keep livestock for milk, meat and ceremonial slaughtering. In comparison the commercial farmer's aim is to achieve higher production, faster growth, less mortality, high turnover which all translate into higher profits. Productivity from goats in the communal farming system (which is based on the extensive system) is said to be poor with a low weaning rate, a high mortality and low turnover. Research indicated that goats from the communal farming system were lighter compared to similar goats in a commercial farming system. This difference in goat performance could be due to a number of factors like, management, nutrition, health, breeding practices, selection, etc. Implementing basic management practices used

in the commercial systems could effect improvement in growth performance of flocks from the communal system. The assumption is often made that communal farmers prefer an increase in goat numbers compared to individual animal performance.

The informal goat sector in South Africa is characterized by poor productivity, prejudices and the approach of goats being "kept" and not farmed, which limits the commercialization of these goats.

Overgrazing and poor management led to erosion and desertification in arid and semi-arid areas, resulting in the reduction of income and destabilization of rural communities. The lack of land available for black farmers contributed to this problem.

South African indigenous does in rural communal farming systems kid for the first time at approximately 17 to 18 months (Webb & Mamabolo). The goat mortality rates in communal systems are also extremely high (41%) compared to systems with better management (5%). One of the reasons for this is that breeding is not controlled and occurs all year round, which creates managerial problems.

The current reproduction status of communal does is low, mainly due to high kid mortalities and inbreeding. In traditional livestock management, does and bucks run together all year round. Usually one or two bucks are left in the herd for up to five years resulting in inbreeding. The genetic resource of indigenous goats is therefore at risk if no effort is made to improve the management of goats in communal farming systems. Research and development efforts can significantly improve production from goats and simultaneously enhance the livelihood of the poor. The major causes of low weaning percentage were poor housing, leading to cold stress in the winter and a build up of manure, which probably increased the levels of parasites.

It was found (Sebei, McCrindle and Webb) that a good market for goats exists in communal areas and flock turnover was about 20%. Thus, any improvement in the survival of kids would lead to a better financial return to farmers by having more goats available for sale.

As with all the agricultural industries, the goat industry can no longer afford inefficiency in any form. Whilst traditional livestock production is a part of cultural life, inefficiency could no longer be part of it and could not be afforded. There is therefore a huge potential for the indigenous goat industry for the purpose of job creation, food security, income improvement, poverty alleviation, etc.

To develop the Indigenous goat industry, it is important to embark on an educational approach and to explain the financial value of goats to the black farmers. In other words black farmers must be convinced that they could make money from goats. The above represents the so-called missing markets. Four aspect need to be addressed in order to reduce the missing markets, namely appropriate infrastructure, education, correct institutional arrangements and reliable marketing opportunities.

An expert in the South African goat industry indicated that the only difference between the Indigenous goat and the Boer goat is its owner and the way the goats are looked after. This statement may oversimplify the issue and ignore achievements through selecting processes, but the assumption could be made that with better nutrition, the Indigenous goat could provide more milk for its kids and a bigger carcass. Together with better management practices (the selection of animals for breeding purposes) and the marketing of animals at a younger age, could increase the economic value of Indigenous goats to a great extent.

Efforts to increase the level of participation for emerging farmers

The North West Department of Agriculture is involved in a programme where the Boer goat is used to improve existing flocks in the hands of emerging farmers. The Boer goat is a meat-producing breed and animal science specialists are continuously selecting those that have the potential of transferring good production traits to their offspring. These animals are then made available to black farmers to improved their flocks. Source: AgriNews – October 2003, page 8.

The Agricultural Research Council (ARC) started a project called the "Commercialisation of Indigenous Goats". This project is regarded as an ongoing project. The main aims of this project are to –

- Enhance access and participation by previously disadvantaged groups;
- Maintain and increase international competitiveness and profitability; and
- Ensure the sustainable use and management of the natural resource base upon which any agricultural activity depends.

The PDA's could provide basic infrastructure in the relevant provinces and help with the gathering of statistics within each province. Sufficient funds must be made available for infrastructure and research.

Government could provide a supporting role relating to extension services, state veterinarians, traceability, hygiene enforcement, inspection services,

etc, which will further increase the participation and contribution from emerging farmers.

4.5 THE ROLE OF GOATS IN PROMOTING FOOD SECURITY

Introduction

Food security means the access of all people to enough food for a healthy and active life. In South Africa, with its skewed *per capita* income (about 5.8% of the population account for over 40% of total meat consumption), Indigenous goats are regarded as an important source of protein and income. Since a significant section of the South African population does not have access to meat on a regular basis and due to the fact that approximately 63% of all goats (including Boer goats and Angora goats) are in black hands, the promotion of the Indigenous goat industry should lead to the promotion of food security.

Goats are deeply embedded in almost every African culture and are true friends to the rural poor in particular. Goats can therefore play a vital role in ensuring food security of a household. Often it is the only asset possessed by a poor household. In time of trouble, such as crop failure or family illness, goats can be sold and food or medicine could be purchased.

In 1998 approximately 30% of the South African population were classified as ultra-poor (i.e. those who do not have sufficient food) and of those, approximately 80% are black living in rural areas. Because of their small size, adaptive feeding behaviour and low management (supervisory and time) requirements (although a study indicated that blacks regarded goats as unmanageable), goats are a viable option in improving the household cash flow of rural people and resolve the issue of food security.

Sangoma's, who are active in most rural areas, also play an important role in the behavioral pattern of their followers. On advice from Sangoma's people in rural areas shall slaughter a goat on a number of occasions. This plays a big role in food consumption and the demand for goats.

Farming with goats a viable option to improve food security

Farming with goats could contribute to both the upliftment of impoverished rural communities and the improvement of those primary and secondary industries that rely on the goat farming enterprises. In the rural, economically deprived regions goats are a ready source of cash income and food and social security.

Goats can be kept on one acre of land or even less. It is much easier for small farmers with no land or only little land to farm with goats than with cattle, because 10 goats could be kept instead of one cattle.

Access to browse plants (shrubs and trees) provides necessary roughage in the diet in addition to shade. Loose housing, like a loafing shed, is acceptable as long as the animals have a dry, draft-free place to rest during the cold, inclement weather. Stout fencing is very important, since goats are curious and enjoy exploring their surroundings.

Droughts appear to be increasing in frequency and many families are moving away from keeping cattle to keep more small ruminants. The switch from large to small ruminants is also driven by the decreasing farm size with each generation inheriting land.

Indigenous goats appear to have a much higher tolerance and resistance to many diseases and parasites, which more than compensates for their smaller size and weaning mass. Goats also utilise a considerable wider range of plant species than either sheep or cattle. In rural areas with a lack of nutrition and management, Boer goats are more exposed to excessive pre-weaning mortalities. Indigenous goats for example have a genetic resistance to heartwater (they get ill but do not die from heartwater) compare to other types of goats. Farmers in rural areas often have managerial limitations and limited resources and for this reasons the keeping of goats should be considered as a viable option for these farmers.

In the communal system of land tenure, all land not set aside for houses or cropping is available as grazing land to all members of the community. As there are no restrictions on livestock numbers, animals in this system are performing according to the availability of nutritional resources. Animals must also be herded for considerable distances to obtain sufficient nutrients in an overgrazed pasture system. An opinion was that solutions for production problems should rather be focused on the shortcomings of the land tenure system rather than a lack of animal research.

A pathway out of poverty

In July 2004 the International Goat Conference was held in Pretoria. This Conference is held every four years and it was the first time that it was held in Africa. A number of 43 countries attended the Conference.

A presentation was made with the theme "Goat farming: A pathway out of poverty". It was emphasized that farmers must be involved in planning their own development. Furthermore, organizing farmers are another important aspect to support goat development.

During the Conference it was emphasized that goats (which are an important source of milk and milk) could play a major role to promote food security. The role of goat milk in Food security Programmes in African countries are currently investigated and implemented.

Heifer International

Heifer Project International was established in 1944. The original aim of this Project was to give poor families a cow or goat so that they would be able to produce their own milk and take charge of their own destiny, instead of supplying them with powered milk. Families that were given a gift of an animal should pass the first female offspring to another family in need. This concept of "passing on the gift" has made Heifer International an unique and highly respected development organization that currently works successfully in more than 50 countries of the world. Heifer International is active in 10 other African countries besides South Africa.

Heifer Project International became involved in South Africa in 1997, when it funded various projects through existing non-governmental organisations. In September 1999, a fully-fledged local office was opened and is situated in Kwazulu Natal. This serves as Heifer-Project South Africa national office with other provincial offices in the Limpopo Province and in the Eastern Cape.

Dairy goats are seen as suitable animals to assist families to break the cycle of poverty. They are easy to handle and manage, especially by women and children; they are prolific and able to survive on a wide range of forage. Goats produce manageable qualities of highly nutritious milk. This milk is an excellent source of protein and calcium and resembles breast milk more closely than cows milk. Goat milk is also more suitable for children that are allergic to cows milk.

Goats remain one of the most suitable vehicles, among the few available options for ending hunger and poverty and improving food security in the marginal areas. Through Heifer International food security in South Africa, has been improved, and in some cases participants have been able to generate small incomes.

4.6 THE CURRENT MARKETING ARRANGEMENTS FOR THE SOUTH AFRICAN GOAT INDUSTRY

Introduction

The majority of goats marketed in South Africa are sold by private transactions in the informal market. These goats are sold live and marketed in KwaZulu-Natal. It is estimated that the Black and Indian population groups consume 80% of goats traded in Kwazulu-Natal. However, because Indians are involved in the goat trade, they are often perceived as the main consumers of goats. Although limited statistics are available, it is estimated that approximately 1.8 million goats are marketed in South Africa annually, of which only 0.5% go through abattoirs. Approximately 250 000 live goats are imported annually from Namibia. The live goat market is characterised by peak demand periods during Easter, December, and the winter months. The seasonal increases in demand are believed to be related to the consumption of goats during festive seasons and ceremonies. Auctions in the producing areas to sell goats have become less important.

In order to investigate the current marketing arrangements for the South African goat industry and due to the difference in structure and marketing arrangements (the characteristics of the relevant goat types are too different), it is necessary to discuss the marketing arrangements for each type of goat under a separate heading.

Angora goats

Angora goats are known for their fiber, namely mohair. Until 1997 the Mohair Board, established in terms of the Marketing Act of 1968, administered the marketing arrangements for mohair. With the closure of the former Mohair Board, the industry established Mohair South Africa, a Section 21 Company, to continue with some of the functions that were previously performed by the Mohair Board. One of the functions is the administration of a pool system for mohair. Mohair SA operates two pools per annum, namely a Summer pool and a Winter pool. These are voluntary pools and producers themselves could decide if they want to participate in the pools or not. The pools on behalf of the producers market the mohair. Mohair SA buys any unsold mohair by the end of a season, with funds transferred from the Mohair Trust.

All the other products derived from the Agora goat, for example its meat, are marketed in the open market – free of any intervention. The Angora goat is less known for its meat and has a relative small carcass.

Boer goats

The South African Boer Goat Breeders' Association (SABGBA) introduced a uniform breeding policy and selection criteria for Boer goats only for socalled "stud" goats. The Association is administering an auction system in order to serve as a mechanism to market stud Boer goats in South Africa, but only a small percentage Boer goats are marketed in this manner. During the October 2004 national auction rams fetched an average price of R6 550 while the average price for does was R2 105. The SABGBA also provides an inspection function of animals offered on auctions. Many farmers however do not belong to the SABGBA.

Boer goats are marketed through out of hand sales to speculators, auctions and sales to abattoirs. The biggest percentage of Boer goats are marketed through traders / speculators. A small percentage of Boer goats are marketed on auctions for breeding purposes.

Indigenous goats

Currently Indigenous goats are marketed in an informal manner by selling it as live animals to any willing buyer. Buyers (or speculators) become the owners of the live animals and sell to their customers, mainly in Kwazulu-Natal.

Recently a company, Kalahari Kid, a joint private company and provincial government initiative (the Northern Cape Provincial Government provided funds), was formed. They are in the process of organising the Indigenous goat industry in the Northern Cape into co-operatives and / or study groups. This is a private initiative to commercialise the Indigenous goat industry. Kalahari Kid, for example tried to sign agreements (contracts) with black producers to supply them with animals. In this case Kalahari Kid could explore marketing opportunities with the peace of mind that there would be sufficient supply of the product to their clients.

In the Eastern Cape Province same farmers co-operatives and the local government in several regions have formed a partnership to establish an entire value chain for the goat industry in that region.

Goat meat in local stores

Until recently, goat meat has not been sold commercially in South African retail stores. Only form 2003 goat meat could be bought in local stores. One of the reasons was the perception that goat meat is inferior to other domestic meats. This was because the younger goats in South Africa are

slaughtered for ritual purposes, resulting in older, inferior animals being available for the commercial market. The fact that the meat is associated with the poor also contributes to this belief.

Another reason why goat meat is not on the shelves of South African supermarkets is the good prices for live goats! Speculators are paying an average price of R350 per live goat. Or R12.50/kg per live goat. This realizes R29/kg per carcass weight while supermarkets must market chevon for R22/kg to create a demand for chevon. That is the reason why 95% of goats are marketed life in Kwazulu-Natal.

Slaughtering information

Registered abattoirs slaughter relatively small quantities of goats. If and when goats are slaughtered the abattoir owner does not differentiate between goats and sheep (and they definitely do not differentiate between what type of goats are slaughtered). A source in the red meat industry was of the opinion that most of the goats that are slaughtered are Angora goats. On the other hand, goat slaughtering figures are normally included in the slaughter figures for sheep. Therefore official statistics on goat slaughtering are not known.

Skins and leather

Most of the goats marketed live in South Africa are slaughtered in remote areas by the end user. Accordingly, the skins are normally thrown away (due to the lack of an effective collective system for these skins) and not marketed. In some cases, though, skins are collected in the rural areas and sold to skin and hide agents, who market the skins in their dried form.

Intellectual property

Boer goats originated from South Africa and breeding material was exported from South Africa in the late eighties / early nineties to a number of countries all over the world. Since then these countries like the USA and Australia exported much more Boer goat genetic material to other countries that South Africa could ever hoped for.

Regarding intellectual property (IP), South Africa has two schools of thought. The one grouping argue that South Africa will shoot ourselves in the foot if we do not have breed protection (IP) mechanisms in place soon. Due to the fact that Boer goat meat could be regarded as a niche product, it could be argued that these countries could compete against South Africa on the international market in the long term if Boer goat production is established successfully in some of these countries. The South African goat industry therefore needs to clarify what information should be freely

available and what information should be regarded as internal industry specific information (and therefore not for sharing with the rest of the world).

The other grouping is the opinion that IP is unnecessary and that possible regulations in this regard would cause unnecessary problems. They also argue that it is too late to implement a Boer goat protectionist policy. Such a policy would promote smuggling and SA citizens will be bought by other countries for the knowledge and expertise. The same happened in the ostrich industry before the industry was deregulated. This group belief that South Africa should stay ahead of the rest of the world through research and the further improvement on the Boer goat.

4.7 THE CURRENT STATUS OF DATA AND INFORMATION IN THE SOUTH AFRICAN GOAT INDUSTRY

Background

Many role-players question current statistics and methodologies to calculate goat numbers in South Africa. Concerns raised by Provincial Departments of Agriculture include:

- A ±60% discrepancy between provincially determined numbers and that of national.
- The exclusion of the emerging farmer and informal business sector.
- Goat numbers are included with that of sheep.
- Current goat statistics does not reflect the status of goat production, in terms of what animals are used for e.g. meat, milk, fibre etc.
- A bias towards the Angora goat.

It is for the above mentioned concerns, that the Reference Group for Technology Transfer and Infrastructure Development (the Provincial Departments of Agriculture), motivated for a review of how data on goat numbers are collected, and active participation of provinces in determining an updated goat census.

Statistics regarding Angora goats and Boer goats are regarded as fairly accurate, but statistics with respect to Indigenous goats are limited.

Boer goats

South Africa has three types of meat goats, namely the Boer goats (approximately 1.3 million), the Kalahari red (approximately 200 000) and the Savannas (approximately 8 000). These are all indigenous goats but ennobled. The Indigenous goats in the hands of black farmers are a crossing of the three types of meat goats, but not ennobled or improved.

Boer goats are normally getting traded through cash sales to speculators or on auctions for breeding purposes.

Indigenous goats

The indigenous goat populations in South Africa exhibit quite distinct phenotypic variation in their size, and other conformation traits such as horns and ears. Breeds are not defined and are usually associated with specific areas, i.e. Venda and Lebowa goats. Production figures are limited for indigenous goats, as records are not usually kempt in

community systems. In general their production is lower compared to the commercial breeds, but they are usually subjected to less food, vaccination and general care.

Although not always reflected by official statistics, it is probable that the number of goats kept by rural people has increased markedly in the last few years. The ownership of goats bestows prestige and they have a place in local custom and religion.

Indigenous goats are normally traded through speculators and informally between families, relatives and other contacts in rural areas. A well informal trading system had been established in rural areas over many years. The demand for goats in rural areas is peaking during holidays when it is used for ceremonies. Sangoma's also play an important role which led to an increase in the demand for goats.

Angora goats

Angora goats normally get slaughtered at an advanced age because the younger goats are much sought after for its mohair. At an advanced age the mohair is stronger and of a lesser value. Due to the fact that international mohair prices experiencing huge fluctuations, goat slaughterings is negatively correlated to the price of mohair.

Goat numbers

The following gives an indication of the number of goats in South Africa.

PROVINCE	ANGORA GOATS ¹	BOER GOATS	INDIGENOUS GOATS	TOTAL
	Numbers ('000)			
Eastern Cape	886	433	1 899	3 218
Northern Cape	57	375	0	432
Western Cape	136	126	0	262
KwaZulu-Natal	0	113	710	823
North West	0	84	531	615
Free State	0	62	9	71
Limpopo	0	51	890	941
Mpumalanga	26	7	48	81
Gauteng	0	13	0	13
Total	1 105	1 264	4 087	6 456
%	17%	20%	63%	100

¹ Received from Mohair SA (2002 figures)

Slaughter figures

Most of the goats presented for slaughter are from commercial farmers. Very few black farmers send goats to an abattoir. In 1997 a total number of 36 511 goats were slaughtered in abattoirs – in other words only 0.5% of stock number in South Africa. The low slaughter rate in the goat industry must be seen against the background that goats are traded and slaughtered in the informal market, that many abattoirs do not distinguish between sheep and goats (include goats slaughtering figures in the figures for sheep), etc.

According to SAMIC, the average weight per goat carcass was 13.5 kg (must be an Angora or Indigenous goat, because the average carcass weight of the Boer goat is approximately 22 kg - the Boer goat is known for its conformation). SAMIC is the representative body in the South African red meat industry and these figures could therefore be regarded as relative accurate. Another source argued that goats are mainly slaughtered at Cato Ridge, Port Elizabeth and Maitland and that it was mainly Angora goats that were slaughtered. The weight of an average sheep carcass is approximately 17.5 kg / carcass.

The Muslim faith requires that livestock is slaughtered according to strict Islamic laws and therefore they have to slaughter their own animals, which are not captured in official statistics.

CONCLUSION

For the purpose of planning it is important to have accurate statistics on the number of goats and where they occur. The following could contribute to obtain more accurate figures:

- Statutory measures
- A representative national organisation
- Organising the industry; and
- Cooperation from PDA's

REFERENCES

A M Mahanjana and P B Cronje, Factors affecting goat production in a communal farming system in the Eastern Cape Region of South Africa, South African Journal of Animal Science, 2000.

Dr Christie Peacock, Goats – a partway out of poverty to prosperity, Plenary paper for the 8th International Conference on Goats, South Africa, July 2004

Dr Merida Roets, From folklore to feasibility: Commercialisation of South Africa's indigenous goats, May 2004

FAOSTAT, Agricultural Data, http://faostat.fao.org

Goat Meat Industry Strategic Plan 1999-2005, Prepared by the Goat Industry Council of Australia and Meat & Livestock Australia, http://www.agric.nsw.gov.au/reader/5550

Goats in South Africa: A significant role-player? Van Marle-Köster, Visser and Casey, University of Pretoria, 2004