CHAPTER 4: GOAT PRODUCT DEVELOPMENT PLANNING

"Hy loop, hy loop, hy loop toldat hy by kinders kom wat bokke oppas. Hy sien hulle drink aan die bokke se uiers, toe sê hy: "Hoekom is julle so dom? Julie kan mos my kleipot leen dan kan julle daarin melk."

"He walked, and he walked and he walked, until he came to some children that were looking after goats. He saw that the children were drinking milk directly from the goat’s udder, so he said to them: "Why are you so stupid? You can borrow my calabash and milk into it."

Minnie Postma, Legendes uit Basotholand.

4.1 Introduction

As can be seen in the previous chapters, the trade in goats in South Africa is limited, and yet South Africa has a wealth of indigenous goats (Chapter 2). Also, there are certain cultural and historical reasons why goats have not been commercialised which are of lesser relevance today (Chapter 3: Hypothesis 2). Furthermore, research efforts in South Africa have mostly concentrated on the study of goats as an animal model (Chapter 3). That is, the nutrition, physiology, genetics and so on of goats have been studied. Some researchers have also investigated indigenous chevon and milk quality, but little has been done in the way of adding value to these products. But, what should or could these products look like? Can anything of any worth be manufactured from indigenous goats? And, most importantly, would anyone want to buy them? The answer to these questions will assist in determining the result of Hypothesis 4. Hypothesis 4 asserts that new South African and global markets exist for new goat products. In the first chapter it became clear that a more market-oriented approach to rural development is needed (ECAPAPA, 2003). Thus, there is a need to determine what these markets are, where they are and what their needs are.

To create a viable industry there should be various products, product ranges, and target markets. Yet, very little product development has occurred in the indigenous goat sector. Furthermore, it has been assumed that there are no markets at which
these products could be targeted. But, other countries have viable industries. This, and the next four chapters serves to investigate the market possibilities and consumer requirements. Finally, various products are developed to supply consumers in these requirements.

Of the six categories of new products that are mentioned by Kotler (2000) quoting Booz, Allen and Hamilton (1982) goat products can be categorised as being “New product lines” (i.e. new products that allow a company to enter an established market for the first time), “Improvements and revisions of existing products” (i.e. new products that provide improved performance or greater perceived value and replace existing products) or “Repositioned products” (i.e. existing products that are targeted to new markets or market segments). This may seem like an anomalous classification. However, this is the case depending from which perspective you view the products. Goat meat (chevon) is a known commodity to certain segments of the population in South Africa, notably Black and Indian urban and rural consumers, for religious purposes. Thus, presenting high value processed chevon products to this same market segment, could be seen as “a revision of an existing product” since instead of presenting the animal live (as is currently the form in which it is sold primarily), it would now be processed, it may attempt to replace other high value meat products, and it may suggest improved health due to its low levels of cholesterol and fat. If a new market segment, such as the White urban consumer of South Africa were targeted, this could be viewed as “repositioning”. Similarly, if an existing meat packer, currently dealing in mutton packaging and distribution were to move into goat meat (chevon) for the Middle Eastern market and compete directly with other foreign companies for that market, this could be classified as the meat packer going into a “new product line”.

It is true that products have been developed from goats across the globe for many centuries. The challenge here is to overcome the inhibitive institutional, historical, cultural and consumer perceptions in creating products and markets from indigenous goats from South Africa. Product development will only be successful if markets for the products exist. Markets will only exist if the products meet the consumers’ needs. This implies that consumers’ needs are known. Moreover, if South African consumers’ needs cannot be met, or their negative perceptions prove too difficult to overcome,
new markets need to be identified elsewhere that can be penetrated, depending on the
types of products that can be developed from South Africa’s indigenous goats.

According to Kotler (2000) product development occurs via the following process:

- Idea generation
- Idea screening
- Concept development and testing
- Marketing strategy development
- Business analysis
- Product development
- Market testing
- Commercialisation

Essentially, these steps were followed for the development of goat products in this
study (although not necessarily in that order). The first three steps of this process will
be dealt with in this chapter, whereas steps 4 through 8 will be dealt with in each
product chapter following this one.

4.2 The process and philosophy of product development for job-
creation

At this point it becomes important to differentiate between product development goals
between private companies and public enterprises. Firstly, the idea to develop new
products or improved products from indigenous chevon, milk, skin, fibre and possibly
genetic and live resources, may hold no benefit to a research organisation aside from
being able to reach its goals of knowledge generation and development of technology
for the benefit of the rural poor. A private company would seek to maximise its market
share, generate more profit, or expand its operations. A research organisation is
mandated to assist in the development of indigenous resources for the benefit of the
rural poor. These objectives, strategies and the resources in question differ substantially from those that would be targeted or utilised by commercial companies venturing into product development. The goals of private companies when undertaking product development are essentially capitalistic and profit-seeking.

Thus, in this study, the potential of goat products was screened for their purpose to increase the income generation potential of non-commercialised goat farmers who were currently not enjoying any value-added benefits that could exist for goats. It was also known that the goat resource is in abundance and under-utilised. Furthermore, special emphasis is placed on poverty alleviation and job creation in South Africa. These are the more “altruistic” goals of public sector product development.

Typically, product development services for the “public good” centre around products that would benefit society as a whole, for example, new vaccines, better communications systems, disease-resistant food plants and so on. (Of course, some private companies also do this type of research for their own gain - Patenting and commercialisation of research findings by public entity organisations has been hotly debated in scientific policy literature in recent years; www.sarima.co.za/docs/dstpaterson_policy%/20issues_june2003.ppt). Thus here, the reasoning is that a public organisation, in this case a research institution, should be able to use tax-payers’ money for the benefit of certain sectors of the population that would not be able to pay for their specific product development needs.

Examples of projects where government departments have assisted with product development exist. In Ecuador, assisted by an export boom and tourist influx, a group of institutions, the national government, the United Nations, and the International Labour Organisation, implemented training courses for indigenous weavers and implemented policies of import substitution commercialisation, in an attempt to promote indigenous crafts for tourists and external markets as far back as the mid-1950’s (Korovkin, 1998). The weavers were taught to improve the quality of their products, to diversify their product ranges and to apply their traditional designs to modern products such as rucksacks, handbags and bangles. What is important to remember here is that the product development exercise is not initiated by the entrepreneur him or herself (As is the case with a private company). The reason for
this is that the entrepreneur quite possibly does not have access to the information that would show him or her that a certain market potential exists. Thus, the mandate for product development services for the rural poor must lie with public sector institutions and such institutions must be created by legislation or government policies.

The next step in product development is that of concept development for each raw product. Questions such as; Who would potentially use each product? What requirements do consumers have for a product? And, what are the current perceptions regarding the product? are asked. In this study product concepts were tested in the marketplace through a pilot national consumer, retailer and exporter study.

4.3 Market Pilot Survey

A structured pilot market survey in 5 urban centres of South Africa served as the first step to determine the existence of a retail demand for processed goat products (since it is already known that goats have a market for cultural use in rural areas or live to the Indian and Black market in KwaZulu-Natal). The main objective of the pilot market survey was to determine the trends, requirements, perceptions and behaviour of those consumers who may potentially buy goat products if they were available through the retail sector into urban areas. This information could then be used to design appropriate products that meet the requirements of the urban consumer. It was not the purpose of this survey to test the penetration of goat products into the market since limited goat products are available in the South African retail industry. Data were gathered through face-to-face interviews with respondents who make themselves available for surveys for a small fee. Thus, the number of respondents was limited by the resources available for the survey.

The following objectives were identified:

- The awareness of the market for goat products, on both spontaneous and prompted levels
- The current and future purchasing behaviour of the market
Price expectations of the market in terms of the different commodities

The needs of the market in terms of the different products

The needs of the market in terms of goat and related products

The perceptions of the market in terms of goat products, as opposed to other existing commercialised products

Research details and methodology

The structured survey tested responses of consumers and retailers — current and possible future sellers — of various goat products (meat, milk, leather and hair), using face-to-face interview techniques. This technique yields the best responses regarding purchases made and allows tie-in with goat products. The survey hypothesis was that, while the biggest demand for goat products lies in its cultural significance amongst various groups, goat commodities could also be positioned as high quality products on par with other products in the retail sector (where they have limited penetration currently).

Therefore, a range of middle- to upper-market consumer respondents were selected, with focus on the purchaser of such commodities, this being the woman in the household. It was agreed that while men are generally the primary breadwinners in a household, women are invariably responsible for the final purchases, as they have the best knowledge of their family’s wants and needs.

The respondents were selected from the four main population groups in South Africa, these being Black, White, Asian and Coloured. Regarding their income, the LSM (Living Standards Measurement) segmentation model was used (www.saarf.co.za), and respondents interviewed fitted into LSM 6, 7 and 8 (categorised from 2001 as 6, 7, 8, 9, and 10). LSM is a wealth measure based on standard of living rather than income indices alone (www.fastmoving.co.za/detail.jsp?providerNo=1959). LSM 6, 7, and 8 are considered as the “emerging market”, the “established affluents” and the “progressive affluents”, respectively. Further, as the main demand is for cultural purposes (which shows limited regional difference), the urban respondents were proportionally interviewed in the catchment areas of the major metropolitan areas of
South Africa: Gauteng (Johannesburg and Pretoria), Cape Town, Durban, Port Elizabeth and Bloemfontein. The respondents were interviewed at their convenience, which is classified as in-home interviews. The reason for selecting this methodology was that the survey requested answers regarding the household purchases of the respondents, and therefore they would feel more at ease at home. Also, a taste test was done, and this required a quiet, relaxed environment.

The fact that retailers would ultimately be the link between the consumers and the manufacturers of the goat products meant that a survey of retailers was necessary. Their inputs into the market study yielded information from a completely different angle than from the consumers i.e. retail stocking decisions. The following retail respondents were interviewed:

- Larger retailers such as Pick 'n Pay, Spar, Woolworths, OK, Checkers, Hyperama
- Smaller retailers, including local cafes and supermarkets
- Curio shop owners and flea market operators
- Fresh produce shops, dairy shops and home industries
- Export companies

The targeted respondents at the above merchants were: merchandise buyers, store owners, managers, marketing managers, and directors. Respondents were interviewed at their places of work, because this provided the most convenient location for them to talk about their products and services.

Once the questionnaires were completed (these are attached as Appendix 2), the forms were edited, back-checked for validity, and all the open-ended questions were coded. Thereafter, data were captured and analysed according to the various important demographic splits. The results were charted to yield the best understandable picture of the information gathered.
In the sections below, the major findings according to the objectives are summarised, and the major strategic recommendations are presented. The market study findings provided details on the demand side of the market and provided direction for planning product development.

Sample demographics

Consumer respondents

The total number of respondents interviewed was 450 of which 350 were consumer respondents and 100 business (retail) respondents. The gender, population group and regional splits were pre-determined for the survey. Thus, 64% of the sample was female respondents, and 36% were male. The bulk of the respondents interviewed were from Gauteng (30.6%) and Cape Town (31.7%), with the rest coming from Durban (21.1%), Bloemfontein (4.9%) and Port Elizabeth (11.7%). Black respondents made up 30.3%, Asians (28.3%), Whites (27.1%) and Coloureds (14.3%).

The ages of the respondents varied from 11.7% being between 16 and 25 years old, to 12% being older than 50 years. The bulk of the respondents were of the ages 26 to 45, which is generally accepted as the population that determines household food trends and which makes the household food purchases (i.e. not children). This segment of the population is considered to be responsible for the economic growth of the country, and therefore the target market for household expenditure items.

The respondents were a well-educated group. Less than 7.5% of the respondents had not completed their primary education, and none were classified as being totally uneducated. Most respondents were English speaking (49.1%), followed by vernacular languages (32.6%) which included Zulu, Xhosa, N. Sotho, S. Sotho, Tswana, Pedi and Venda. The remaining respondents (18.3%) were Afrikaans speaking.

Regarding occupations, most people were unemployed (housewives – 28.3%). This was expected as the consumer survey targeted respondents who are responsible for household purchases. Other occupations included bank managers and supervisors (19.4%), clerical, reception and secretarial positions (15.1%), plumbers, artisans,
mechanics and hairdressers (10.3%), people from the educational sector (teachers, lecturers, principals – 8.6%), labourers, messengers and domestic workers (7.4%), nurses, childcare, community workers (6.3%), tourism related workers (2.6%), and medical and other professionals (2.0%).

Seventy (70%) percent of the consumer sample were Christians and 18% were Hindu. Only 3.4% were from the Islam religion, and the rest of the sample varied from Jewish (0.9%) through to no religion (1.4%), and others (6.3%). Regarding the income breakdown, which was almost pre-determined by the LSM 6, 7 and 8 quota, an expected result was achieved. Five point eight (5.8%) percent of respondents refused to declare their salaries. This is considered to be quite low. People are seldom prepared to divulge information of the type requested, in particular, respondents were asked for their monthly, household (all income earners in the house combined) income. Households earning less than R 3 000 made up 20.3% of the sample, between R 3 000 to R 6 000 (40.8%), between R 6 000 to R 9 000 (21.0%) and R 9 000 and more (12.1%). Thus, the bulk of the respondents were from households earning up to R 6 000, and only one in every five households earning less than R 3 000. The top income group (A-income) in South Africa starts at R 10 000, and is only represented by about 5% of the population.

Regarding the tourist sample segment of the survey, the only demographic question relating to them, was their place of origin. Most tourist respondents originated from other countries in Africa, followed by Europe, the Far East, Australia, and North America. These results are interesting because they indicate possible business opportunities. First, 32% of the tourists were Black – mostly coming from the other African countries – which may reveal a potential for future export of goat products to African countries especially if it is determined that demand for goat products is culturally driven by Africans. The same export opportunities could apply to other selected countries, such as India or other eastern countries.

Although the demographics of the sample are split in the above-mentioned way (which, to an extent, mirrors the demographics of the populations in the cities sampled), the results are not split according to these demographics, but overall results and responses to the questions are recorded. This was done to obtain a response
that would be comparable to the response obtained if products were presented in the normal retail environment. Although some stores are frequented by certain customers, it is assumed that all population groups, genders, religions and so on, have free access to all retail outlets in the cities sampled.

**Business demographics**

The business respondents were mostly found in the economic hubs of the country, namely Johannesburg (49.5%), Durban (19.8%) and Cape Town (30.7%). These areas were targeted in order to gather the relevant information from institutions that form a part of the country’s main business activities. Within the companies responding, 80% were retail oriented and 20% were import/export companies. The focus was on small and medium companies, because at present these businesses represent the retail segment better than large multi-nationals do. Almost twenty-two (21.8%) percent had 51 or more employees, 18.8% had 21 to 50 employees, and the majority remainder had 6 to 20 (29.7%), and 1 to 5 employees (29.7%). Eighty percent of the respondents in this sample were managers or owners of the companies – the main decision makers. However, interviewees also included a number of merchandise buyers (11.9%) and directors (5%).

**Awareness of goat and related commodities**

Awareness was determined on both a spontaneous and a prompted level, where spontaneous indicates the “top-of-mind” awareness of a product following a question: such as “Please tell me all the different types of meat that you know of or have ever heard of”. Prompted awareness indicates the awareness of a product, when prompted to answer Yes or No to remembering it – an indication that the respondent is aware of the product, but it is not the first thing that comes to mind when speaking about the product.

A high spontaneous awareness indicates a well-established brand or product, while a high prompted awareness, with a low spontaneous awareness, normally indicates the need for advertising or communication to the consumer. Awareness exercises were done for meat types and dairy products – the main product areas planned for goat commodities.
Awareness of different meat types

As was expected, the well-known meat types were very well known, the following percentage of the respondents mentioning these types spontaneously, and then when prompted: beef (37.4% spontaneous and a further 59.1% when prompted), mutton (33.7% spontaneous and a further 60.9% when prompted), and poultry (23.7% spontaneous and a further 71.1% when prompted). Followed by pork (6% spontaneous and a further 68.6% when prompted %), seafood (2.6% spontaneous and a further 66.6% when prompted), and venison (0.6% spontaneous and a further 29.7% when prompted). Chevon was mentioned spontaneously by 0.3% of the respondents, but when prompted was mentioned by 26.3% (similar to venison). This indicates that a promotional or informational campaign for chevon is required to make this meat type more known to consumers.

It is interesting to note that the responses for this result came mostly from Black, Asian and Coloured respondents. There were very few responses for this result from Whites (data not shown for this split).

Awareness of different dairy products

Dairy awareness was done merely for interest, as it is too complicated to conduct an exercise similar to the meat-type test for all the various dairy products. However, the total response results indicate that the most known dairy product was milk (97.7%), followed by cheese (96.6%), spreads (80%), yoghurt (77.7%), cream (67.1%), desserts (27.4% and others (14.3%). Respondents were less aware of dairy products originating from different animal species.

Awareness of goat products

Amongst the awareness of goat products specifically, the order of spontaneous awareness, followed by prompted awareness was as follows; milk (57.1% spontaneous and a further 28.6 % when prompted), chevon (55.4% spontaneous and a further 28.3 % when prompted), cheese (36.3% spontaneous and a further 26 % when prompted), live goats (16% spontaneous and a further 55.1 % when prompted), leather products (10% spontaneous and a further 55.1 % when prompted), mohair
(6.6% spontaneous and a further 44.5 % when prompted), cashmere (4% spontaneous and a further 35.4 % when prompted), processed chevon (2.3% spontaneous and a further 28 % when prompted), and powdered milk (0.6% spontaneous and a further 31.7 % when prompted). These findings indicate that general products (milk, cheese, chevon) are more known to the consumer (top of mind) than specialised ones (cashmere, processed chevon).

Conclusions

The meat-type results indicate that processed chevon is not top-of-the-mind for consumers that buy meat, although it definitely exists in 26% of the consumers’ minds. This is substantiated by the knowledge that goats are largely used for cultural purposes, and people do not think about goats as something to buy in a retail store for general household purposes. The results also indicate the need for an education campaign on chevon, to make people aware of the meat, while explaining the features and benefits of chevon to them.

The dairy results shows that the respondents buy the general items (milk, cheese etc.) more than they buy special (luxury) items like desserts and cream. This indicates that dairy from goat milk should be positioned as being similar to general purchase needs, and not necessarily as a luxury item. The goat product awareness confirms the above conclusions. Goat products should be positioned as a general product, and not necessarily as processed luxury items.

Buying behaviour regarding goat and other commodities

Respondents were asked to describe their behaviour regarding different meat types, dairy products, as well as goat products, choosing the most relevant behaviour from the following list:

- Regularly buy/currently stock this item, and will continue to do so
- Occasionally buy/stock this item and will continue to do so
- Used to buy/stock this product – don’t anymore, but may again
- Don’t buy/stock this item, but may in future
- Used to buy/stock this item, and won’t again

- Don’t buy/stock this item, and won’t in future

- Don’t know of this item

The results of the meat behaviour were expected, with poultry, mutton, fish and beef being the most frequently used (See Figure 4.1). A positive indicator of interest in goat products, however, is that chevon showed a very large (25.4%) proportion of people saying they are prepared to use chevon meat in future, even if they do not use it currently. This positive consumer response could be enhanced and exploited by goat producers/marketers.

![Figure 4.1 Behaviour towards meat products](image)

Regarding the dairy products, the only significant result is that (again) milk, cheese, and spreads are the most commonly used, followed by yoghurt, desserts and creams
(See Figure 4.2). This confirms once again that luxury items are used less than the more general necessities.

![Bar chart showing behavior regarding all dairy products](chart.png)

**Figure 4.2  Behaviour regarding all dairy products**

When reporting on goat products, a trend develops. Across all product categories, the results showed that large proportions of the potential segment as per the chart show "Don't buy/stock, but may in future". This indicates a potential market for both consumers and business to "at least try these products out", before condemning it. On the top of the behaviour chart were fresh meat, milk, cheese, leather products, and live goats, indicating that the market already uses these products (See Figure 4.3).

However, the results for retailers show less meaningful results since some retailers do not stock curios, for example butcher shops, whereas, curio stores would not stock dairy products.
Figure 4.3  Consumer behaviour regarding goat products

Figure 4.4  Retail behaviour regarding goat products
The main conclusion drawn, from both consumers and business, is that although chevon and other products are used, they are used far less than the more known products (already commercialised). There appears to be a potential market for goat products, however. The market opportunity exists because at least 25% of respondents (on average) are willing to try these products in the future.

**Needs and perceptions of consumers regarding goats and related products**

In this exercise, the following was evaluated:

- Perceptions of respondents to different meat types (positive and negative)
- The importance of needs of stores that stock meat types (positive and negative)
- The importance of needs of dairy products (positive and negative)
- The importance of needs of stores that stock dairy products (positive and negative)

Perceptions regarding different dairy products were not evaluated, as there are too many different dairy product types, and it would be difficult to try and compare butter with desserts, or cheese with cream. Therefore, only the needs with respect to dairy products at the stores that stock them were evaluated.

The attributes (positive and negative) that were used to determine the perceptions, as well as the relative importance of the need, were generated in a qualitative phase (that preceded this survey), and proved to be a valuable exercise when designing new meat products because they gave an indication of what attributes consumers ascribe to meat products in the market place. The positive and negative attributes identified by the respondents in the qualitative phase are shown in Table 4.1 below.
Table 4.1  Positive and negative attributes of importance to consumers

<table>
<thead>
<tr>
<th>Positive attributes</th>
<th>Negative attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widely available</td>
<td>Tough type of meat</td>
</tr>
<tr>
<td>Correct farming methods applied (a measure of awareness of the ethical treatment of farm animals)</td>
<td>Shrinks when cooked</td>
</tr>
<tr>
<td>Juicy</td>
<td>Expensive</td>
</tr>
<tr>
<td>Healthy colour</td>
<td>Stringy</td>
</tr>
<tr>
<td>What the family enjoys</td>
<td>Against religious or personal beliefs</td>
</tr>
<tr>
<td>Expensive but worth it</td>
<td>Only available in bulk</td>
</tr>
<tr>
<td>Nutritious</td>
<td>Meat looks dry</td>
</tr>
<tr>
<td>Versatile</td>
<td>Upsets my stomach</td>
</tr>
<tr>
<td>Trade/Religious purposes</td>
<td>Too bony</td>
</tr>
<tr>
<td>Lean</td>
<td>Goes off quickly</td>
</tr>
<tr>
<td>Tender</td>
<td>Stale/bland taste</td>
</tr>
<tr>
<td>Good value for money</td>
<td>Smelly</td>
</tr>
<tr>
<td>Easy to prepare</td>
<td></td>
</tr>
<tr>
<td>Quick to prepare</td>
<td></td>
</tr>
<tr>
<td>Low in cholesterol</td>
<td></td>
</tr>
</tbody>
</table>

**Meat**

The perceptions are described by using attributes that received the highest score for each meat type. Beef is seen by the market as being a meat type that is widely available on the market, produced using correct farming methods, a juicy meat with a healthy colour. It is a meat that the family enjoys, and is expensive, but worth it, while being nutritious and versatile. It is also used for traditional purposes, and is lean and tender. On the negative side, beef is often seen as tough, shrinks when cooked, expensive and stringy. See Figure 4.5 and Figure 4.6. The respondents' perceptions paint a very good picture, keeping in mind that beef was amongst the top three meats being used by the market. The marketing challenge is to position chevon as a product that possesses some (as many as possible) of these attributes in order to create a perception for chevon that is similar to that of beef. At the same time, the objective should be to try and avoid as many of the top negative attributes of beef, thus creating a perception of chevon as being worth (at least) a try.
Figure 4.5  Perceptions: Beef attractors

Figure 4.6  Perceptions: Beef repellors
Pork is seen as widely available, with correct farming methods applied, and as nutritious, enjoyed by the family, with a healthy colour. It is juicy, and is good value for money, while being versatile and tender. Negatively, pork is seen as against peoples’ religious beliefs, upsetting their stomachs and as meat that perishes quickly. Pork is not used for traditional purposes, but is perceived similarly by the market as beef, with few negative strings attached (See Figures 4.7 and 4.8).

Poultry is seen as a meat that is widely available, easy to prepare, something the family enjoys, and quick to prepare. It is good value for money, versatile, tender and low in cholesterol. On the negative side, poultry is seen as quickly perishable, shrinks when cooked, too bony, and is sometimes regarded as a dry meat (See Figures 4.9 and 4.10).

Figure 4.7 Perceptions: Pork attractors
Figure 4.8  Perceptions: Pork repellors

Figure 4.9  Perceptions: Poultry attractors
Figure 4.10  Perceptions: Poultry repellors

Nutrition seems to play a big role in meat purchases. Beef and pork were referred to as nutritious; meanwhile poultry was described as low in cholesterol. Favourable nutritional attributes, thus, are an aspect that could be used to position chevon.

Mutton is also seen as widely available, with correct farming methods used, and as a juicy meat. It is enjoyed by the family, is expensive but worth it, has a healthy colour, and is tender, nutritious, versatile and easy to prepare. Mutton, however, is also perceived as expensive, shrinks in size when cooked, too bony, and sometimes tough (See Figures 4.11 and 4.12). As was the case with poultry, mutton is seen as a type of meat that is very practical and worth paying the extra few rand.
**Figure 4.11**  Perceptions: Mutton attractors

- Widely available: 62%
- Correct farming methods applied: 59.1%
- Juicy: 54.8%
- What the family enjoys: 52%
- Expensive but worth it: 51.1%
- Healthy colour: 49.7%
- Tender: 47.4%
- Nutritious: 44.3%
- Versatile: 42%
- Easy to prepare: 39.4%
- Quick to prepare: 29.4%
- Good value for money: 29.1%
- Trade/religious purposes: 23.1%
- Lean: 19.7%
- Low in cholesterol: 4%

**Figure 4.12**  Perceptions: Mutton repellors

- Expensive: 55.4%
- Shrinks when cooked: 51.4%
- Too bony: 16.9%
- Tough type of meat: 14.9%
- Stringy: 11.4%
- Goes off quickly: 10%
- Only available in bulk: 9.1%
- Meat looks dry: 5.7%
- Smelly: 5.7%
- Upset my stomach: 3.1%
- Against relig/pers beliefs: 2.9%
- Stale/bland taste: 2.9%
Venison has a different profile, and is seen as nutritious, lean, and expensive but worth it. It has a healthy colour, is juicy and low in cholesterol. The family enjoys it, and it is seen as a versatile meat. Respondents expressing knowledge of venison (low numbers), see the meat’s most negative attributes as being tough and dry, stringy, and with a stale and bland taste. The responses indicate that venison has a good profile, though few respondents could accurately comment on venison – it is not a very well known meat type, and there are also too many derivatives to really leave a perception (See Figures 4.13 and 4.14).

Fish is seen as nutritious and low in cholesterol, easy and quick to prepare and widely available. It is lean and tender with good value for money. This is a great perception to have: very healthy, practical, yet not too expensive. Fish, is however, also seen as too bony, perishing quickly, smelly and expensive (by others). Unfortunately, it is also perceived as smelly and perishing quickly (See Figures 4.15 and 4.16).

![Perceptions: Venison attractors](image-url)
Figure 4.14  Perceptions: Venison repellors

Figure 4.15  Perceptions: Fish attractors
Figure 4.16 Perceptions: Fish repellors

Chevon was firstly seen as being used for traditional and religious purposes, with correct farming methods applied, nutritious, juicy, and expensive but worth it, whilst being widely available and a lean meat (See Figures 4.17 and 4.18).

Figure 4.17 Perceptions: Chevon attractors
Figure 4.18 Perceptions: Chevon repellors

By far, the responses show that the main ingredient in the current perception of chevon is the use of goats for traditional purposes. The other attributes identified paint a pretty picture, but the number of responses for those attributes was much lower than the cultural purposes indicator. Most likely, this was due to Black and Asian people mentioning the traditional purposes attribute, which could be expected based on the use of goats in religions common among these groups.

Chevon is not seen as being low in cholesterol, easy and quick to prepare, nor tender. Accordingly, if chevon has these positive attributes, marketing programmes should focus on these traits in terms of educating the population about chevon. On the negative side, chevon is perceived as a smelly meat, and quite stringy. It is a tough type of meat that is only available in bulk. It upsets my stomach, and usually has a stale and bland taste. Clearly, the negative responses set the scene for how chevon
should not be positioned in the market. However, if these above perceptions are in fact true, then the marketing campaign should be structured to concentrate on other features of the products, and not any of the above. Furthermore, when conducting product development, these negative attributes should be reduced through the product design.

**Meat store needs**

From the consumer’s perspective, the need is for stores to stock fresh products that are competitively priced and clearly graded. Care should be taken to ensure that the meat is well packaged and refrigerated, with clearly marked sell-by dates. Marinated meat, de-boned meat, and vacuum-packed meat is of lesser importance as are the range of cuts or variety of pack sizes. If stores want to repel people, they should sell perished meat, under unhygienic conditions, or meat that is bloody and not properly cleaned. These consumers' needs can be seen in Figures 4.19 and 4.20.

![Figure 4.19 Meat store needs ranking - Attractors](image)
Figure 4.20  Meat store needs ranking – Repellors

For stores that sell meat, the focus should be on three things: Freshness, Freshness and Freshness. In addition, to meet consumer needs, stores should also have fair prices and properly grade their meats.

Dairy products

The most important needs in terms of dairy products (all possible dairy products) are as follows:

- Versatility
- Long lasting product (shelf life)
- Low in cholesterol
- Nutritional information listed on the packaging
- Taste should be maintained after thawing
- Available in different sizes
Expensive, but worth it – value for money

Re-sealable packaging

Less important needs were food for traditional purposes, re-usable containers, alternative for cow’s milk, and serving suggestions. Dairy products should not perish quickly, should have expiry dates and must be healthy.

The rankings for dairy needs are shown in Figures 4.21 and 4.22 below.

Figure 4.21  Dairy needs ranking – Attractors (all possible dairy products)
Figure 4.22  Dairy needs ranking – Repellors

Dairy store needs

Stores that sell dairy products should definitely only stock fresh items in a hygienic environment with clearly displayed sell-by/expiry dates. Offering expired products is a big negative, as is offering poor quality products and un-refrigerated items (See Figures 4.23 and 4.24).

Figure 4.23  Dairy store needs ranking – attractors
Figure 4.24 Dairy store needs ranking – repellors

Dairy products should be positioned as fresh, clean products following on the expectations from the market. Nutritional value is highly important, as is the product’s versatility. For goat products to be successfully marketed, each of these needs should be clearly addressed. Again, freshness seems to be the single most important factor.

Price expectations of goat products

Table 4.2 explains the price categories that consumers are willing to spend on various goat products. The consumer column represents what the consumers said they are willing to pay, and the business column represents what the businesses said they think consumers would be prepared to pay. The figures presented are averages, and represent trends as seen by the market. These prices show that consumers generally want to pay less than retailers might think. This is an age-old trend, whereby consumers would always pay as little as possible for as much as possible. Therefore, the price for goat commodities should be within the identified market range; however, pricing should also closely follow the marketing programme themes. For example, to position goat commodities as being of a high quality, prices should be a little higher rather than the low-end of the range, building the consumer perception of quality. Consumers may be willing to spend a little extra, if they are convinced it is really worth it.
Table 4.2  
Price expectations of goat products

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>UNIT</th>
<th>CONSUMER</th>
<th>BUSINESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevon</td>
<td>Kg</td>
<td>R 5 to R 20</td>
<td>R15 to R25</td>
</tr>
<tr>
<td>Goat milk</td>
<td>Litre</td>
<td>R1.50 to R3</td>
<td>R2.50 to R4</td>
</tr>
<tr>
<td>Goat cheese</td>
<td>Kg</td>
<td>R5 to R20</td>
<td>R 25 plus</td>
</tr>
<tr>
<td>Live goats</td>
<td>Animal</td>
<td>R250 plus</td>
<td>R150 to R300</td>
</tr>
<tr>
<td>Mohair rug</td>
<td>2x3m</td>
<td>R100 to R 300</td>
<td>R350 plus</td>
</tr>
<tr>
<td>Goat leather jacket</td>
<td>One jacket</td>
<td>R500 plus</td>
<td>R500 plus</td>
</tr>
<tr>
<td>Processed meat</td>
<td>Pack of sausages</td>
<td>R5 to R15</td>
<td>R10 to R20</td>
</tr>
<tr>
<td>Cashmere jersey</td>
<td>One jersey</td>
<td>R100 to R300</td>
<td>R200 plus</td>
</tr>
<tr>
<td>Goat leather handbag</td>
<td>One handbag</td>
<td>R50 to R150</td>
<td>R100 to R200</td>
</tr>
<tr>
<td>Powdered Goat milk</td>
<td>1 kg tin</td>
<td>R0 to R20</td>
<td>R7.50 plus</td>
</tr>
</tbody>
</table>

However, it is quite obvious that people are more acutely aware of prices for general items (milk, cheese, meat etc.) than for select goods, such as leather items, cashmere etc. Price attributes and comparisons with substitute products could be included in a programme of public education that is initiated.

Propensity to purchase goat commodities

Respondents were asked about their willingness to purchase chevon, goat cheese, cashmere products, and goat leather products. The responses were derived using a scale to indicate the different likelihood for the respondents. Thereafter, the respondents were given a piece of “droë wors” (dried sausage), as well as sample of goat cheese to eat (These products were chosen since they were easily transportable without the need for refrigeration). They were also shown colour photographs of cashmere and leather products, and were again asked about their willingness to purchase these products.

The main result of this exercise is that in every single case, the likelihood to purchase increased after having tasted or seen the actual products. This was the case for both business and consumers. Note, however, that the increases were less for cashmere and leather products. The increases for meat and cheese were higher than the other products, indicating that these products would probably have a better entry into the market than the others would. The effect of these increases can be clearly seen in Figures 4.25, 4.26, 4.27, 4.28, 4.29, 4.30, 4.31 and 4.32.
Figure 4.25  Propensity to purchase goat cheese - Business

Figure 4.26  Propensity to purchase goat cheese – Consumer
Figure 4.27  Propensity to purchase chevon - Business

Figure 4.28  Propensity to purchase chevon - Consumer
Figure 4.29  Propensity to purchase cashmere products – Business

Figure 4.30  Propensity to purchase cashmere products – Consumer
Figure 4.31  Propensity to purchase leather products – Business

Figure 4.32  Propensity to purchase leather products – Consumer
4.4 International Goat markets

There is an abundance of international trade information resources available, providing comprehensive data; however, the resources do not treat the market for goats and goat products on a global or even regional basis. Consequently, information was sourced from the U.S., Australia, and New Zealand; emerging economies are largely unreported (Smuts, 1998b).

In 1998, a survey (Smuts, 1998b) revealed only two countries – Australia and New Zealand – as net exporters of goat meat worldwide. Confirming the trends in South Africa, the demand for goat meat is seasonal, with Easter, Christmas and Muslim holidays bringing peaks in demand. In the U.S. at least, the goat meat market is seen as an "ethnic" market relative to the overall U.S. population, and demand increases in population centres that commonly prepare goat meat. Different characteristics hold for other countries (Smuts, 1998b).

Important parallels can be drawn between South Africa and the U.S. regarding the demand and the expansion of goat production. Gipson (1996) states that "simply increasing goat numbers is not the answer. Well organised marketing strategies are needed to ensure profitability for goat producers". In 1997, according to USDA statistics reported by Cornell University, the U.S. imported 3.2 million kg of fresh, chilled or frozen goat meat, mainly arriving from Australia (95%). U.S. exports amounted to 246 700 kg with the majority being sold to Brazil (40%) and Mexico (29%). Live goat import and export were 1 172 and 66 924, respectively. Over 90 % of U.S. live goat exports were to Mexico (Smuts, 1998b).

It has become known that one of the largest international markets for live goats and chevon is to be found in the Middle-East. These countries require millions of kilograms of goat meat for their Ramadan and Haj festivals. This market is in the process of being exploited by the Kalahari Kid Corporation who has supplied the data shown below (Kalahari Kid Corporation, 2003). The Kalahari Kid Corporation will be discussed in the case studies later in this thesis.
According to the Kalahari Kid Corporation (2003), the current competitors in the international marketplace are Australia, New Zealand, Brazil, Somalia, India, Pakistan and France. Australia are selling their “feral goat”, the Brazilians their “jungle goat”, and the New Zealanders have penetrated the Middle East market with a high-value added gas flushed packaging (their competitive advantage). Brazilian exports are exposed to a rebate-subsidy system to allow them to be competitive on the International market. Australian suppliers are familiar with the Middle East market and similarly have a competitive edge above other suppliers due to the Australian Government rebate system. This system allows the red meat industry of Australia (AUSMEAT), to export red meat products at cost, but all exports are subject to an Australian Dollar rebate of 80c per kilogram. The Argentinean “Jungle Goat” is also being supplied to the Caribbean. Argentinean Goats have been widely accepted in the Middle Eastern markets due to the competitive prices offered. However they compete with the Indian and Somalian goat in their size and price. The Brazilian, Indian and Somalian product thus competes on price. Although the French receive a higher price for their goats, they trade on quality and are an alternate supplier to the Middle East. Thus, the French and New Zealand product are both high quality and high value products.

To Saudi Arabia specifically, fresh chilled carcasses are currently being supplied by Pakistan, India, Sudan, Ethiopia and Somalia, frozen goat carcasses are being supplied by the UAE and fresh or chilled cuts of goat with bone in are being supplied by UAE and others (South Africa is classified as a supplier under “other”). Figure 4.33 and Figure 4.34 graphically depicts the present supply of goat meat into Saudi Arabia (Exact figures cannot be reported here due to their proprietary nature) (Kalahari Kid Corporation, 2003).
Figure 4.33  Chilled goat carcasses supplied into Saudi Arabia (Kalahari Kid Corporation, 2003)

Figure 4.34  Frozen goat carcasses supplied into Saudi Arabia (Kalahari Kid Corporation, 2003)
Figure 4.35  Chilled/frozen goat cuts with bones supplied into Saudi Arabia (Kalahari Kid Corporation, 2003)

Figure 4.36  Frozen boneless goat meat supplied into Saudi Arabia (Kalahari Kid Corporation, 2003)
Furthermore, on a recent visit to China, it became clear that the market for Boer goat embryos and live animals to this country are very large. China wishes to establish its own chevon trade, and has identified the Boer goat as the animal with the most potential to do this. They have provided indications that they would require 100 000 Boer goat embryos, as well as the expertise to manage and breed these animals correctly.

4.5 Strategic recommendations

In summary, this market study revealed that:

- The interest shown in the likelihood to “try out” goat commodities amongst the targeted sample, shows that educated, middle to upper income people from all groups (with the possible exception of Whites) i.e. those interviewed, are a potential target market.

- Awareness of goat commodities is not very high. There appears to be a need for a campaign to create awareness. The campaign should focus on the more general product types, and should include the features and benefits of goat commodities.

- A definite potential in the market exists amongst the sample in terms of their behaviour. An apparent flexibility in purchase decisions should be exploited positively, especially in conjunction with an awareness campaign.

- Because beef, mutton and poultry are the most commonly used meat products, chevon should adapt to their consumer perceptions, focusing on attributes such as nutritious, long lasting, correct farming methods, practical (quick and easy), value for money, not expensive, not smelly, not stringy and tender.

- Goat dairy products should be marketed as being versatile, long lasting, fresh, and low in cholesterol, nutritious, healthy and hygienic.

- People are negative towards goat products, mainly because of lack of knowledge. Negative consumer perceptions, could possibly exist because the products have never been commercialised. There is a need for consumer
education informing consumers and retailers about the possibilities, features and benefits of goat products. This promotion process should be designed to not only make people more aware of goat products, but also to change their perceptions about these products, opening up the market for the commercialisation of goat products.

- Less resistance to the product will be experienced if overseas markets are targeted, but cognisance of the various marketing strategies used by competitors must be borne in mind. These strategies include various forms of value-addition or competing simply on price.

Hypothesis 4 asserted that new South African and global markets exist for new goat products. This survey found this to be the case. Markets for goat products already exist internationally and the local market possesses opportunities for development. In fact, enough positive feedback and consumer information was obtained to warrant further product development.

Sub problem 3 questions whether products of indigenous goats can be utilised commercially. Are there products of value from indigenous South African goats? Do the products from the indigenous goats found in South Africa measure up to the market requirements? Can products that fulfill the needs of the local or international marketplace be produced from indigenous South African goats? Utilising the information gleaned from this market survey, the further steps in the development of meat, cashmere, leather and milk will be described in Chapters 5, 6, 7 and 8, respectively, to follow.