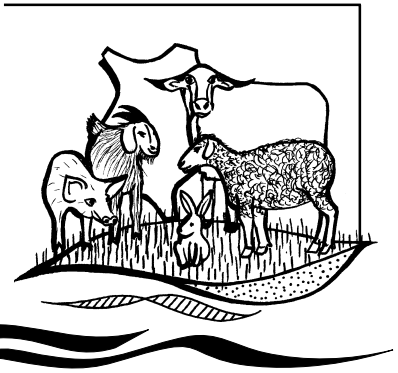




## Section I

# Red Meat Marketing



## Introduction

This paper is divided into three sections. We first discuss livestock and red meat marketing in South Africa and this is followed by a review of pig marketing. Finally, we briefly look at rabbits and cane rats, as alternative sources of animal protein.

## The evolution of the red meat marketing scheme

Until 1932, red meat marketing was not controlled. After the depression and drought of the early 1930's the Board for supervision of the meat trade was established to control the maximum number of livestock to be sold at any market in South Africa and to subsidise exports. In 1944 a new Red Meat Scheme with total control according to grade and mass in the controlled areas was established. The most recent Red Meat scheme was established in 1964, according to the Marketing Act of 1964. Price control was substituted by minimum prices and auctioning of carcasses according to mass and grade. The Meat Board was the regulating body of the scheme, and consisted of a majority of producer members.

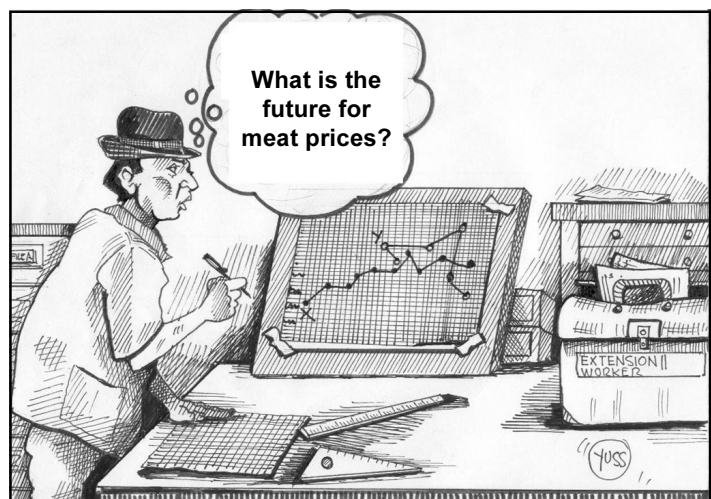
The floor price scheme guaranteed minimum producer prices at controlled markets. If auction prices fell to the floor prices, the Meat Board bought in and re-auctioned the meat after a period of storage. The main objective of the floor price scheme was to raise producer prices or to keep them from falling too far in an oversupply situation. Whilst supply control to the controlled markets was used to protect the floor price scheme.

Every producer or owner of livestock who had more than 20 head of cattle, 20 pigs or 100 goats and/or sheep had to register with the Meat Board.

Reforms in the scheme were as follows:

- Abolition of restrictions on movement from controlled areas (1992).
- Abolition of restrictive registration of producers, abattoir agents, butchers, dealers, processors and importers.
- Abolition of board in 1997.

The new Marketing of Agricultural Products Act, Act No. 47 of 1996 spelled out a new set of rules that differ greatly from earlier legislation. **Producers can now produce red meat on their own responsibility and sell to buyers of their choice at a mutually agreed price.**



# General domestic red meat market trends

Although the red meat industry is still one of the most important agricultural sub-sectors in South Africa, it has come under increased pressure following deregulation. This is mainly due to a declining per capita demand for red meat, increased competition from overseas producers, and changes in consumers' preferences. The dwindling per capita demand for red meat can be attributed to a decline in the per capita disposable income of South Africans. This, coupled with consumers becoming more health conscious, has meant the substitution of poultry for red meat.

Since 1994, red meat imports have increased substantially due to deregulation and South Africa's compliance with world trade liberalization rules, as set out in the Marrakesh agreement. This opened the South African red meat market to overseas producers who are, in most cases, heavily subsidised. Although the South African red meat industry is not yet as sensitive as the South African grain industry towards changes in, for example, prices on the international market, this situation is changing rapidly.

## Domestic production trends

Figure 1 shows the South African cattle herd and the number of animals slaughtered annually since 1970. The commercial cattle herd comprises about 65 percent of the total cattle herd. Approximately 35 percent of all cattle in South Africa are owned by non-commercial farmers. Sixty-eight per cent of the commercial herd are female animals, of which the majority are suitable for meat production.

The composition of the national herd is not expected to change significantly in the future.

The main feature of Figure 1 is the cyclical trend in herd numbers. The primary contributor to this phenomenon is the climate.

Figure 1 shows that the beef industry is presently (end 2000) **moving out of herd-building into a herd-liquidation phase**. This entails an increase in the number of cattle slaughtered. The number of cattle slaughtered during 1999 was over 3,3 million. It is believed that the reduction in cattle numbers is also a reaction to:

- increased market uncertainty,
- limitations with regard to carrying capacity and
- economic considerations.

Since the deregulation process began in 1992, there has been a remarkable **increase in the number of cattle slaughtered in previously non-controlled areas**. This is a sign that marketers and producers are taking advantage of the free market system. The marketing of cattle in the **informal market is also expected to see enormous growth over the next few years**. This, however, poses a problem, as information about the operations of the market will become more difficult to obtain.

From Figure 2, it is clear that **imports from overseas have increased dramatically** since 1994. As soon as **domestic prices increase, so will imports**. This puts pressure on domestic prices to fall back to lower levels. This relationship between imports and domestic beef prices is believed to be one of the main beef price drivers for the future. Another important factor that will have an influence on the competitiveness of domestic producers is the depreciation of the Rand.

Another issue of importance is that although the EU was traditionally the major exporter of beef to South Africa, imports from countries such as Brazil and Argentina may also pose a threat to South African producers. The reason for this stems from the large decline in the exchange rate of these countries against the South African Rand, marketing imports more expensive.

The per capita consumption of red meat has declined since the early 1930's. This can be mainly attributed to decreasing or stagnating per capita disposable income, and the price advantage of poultry over red meat.

## Price trends

**Prices have declined**, in real terms (e.g. the buying value of a Rand). It is important to note the anti-cyclical movements between real producer prices and per capita consumption. What is, however, of concern is the general downward trend in both of the variables shown in Figure 3.

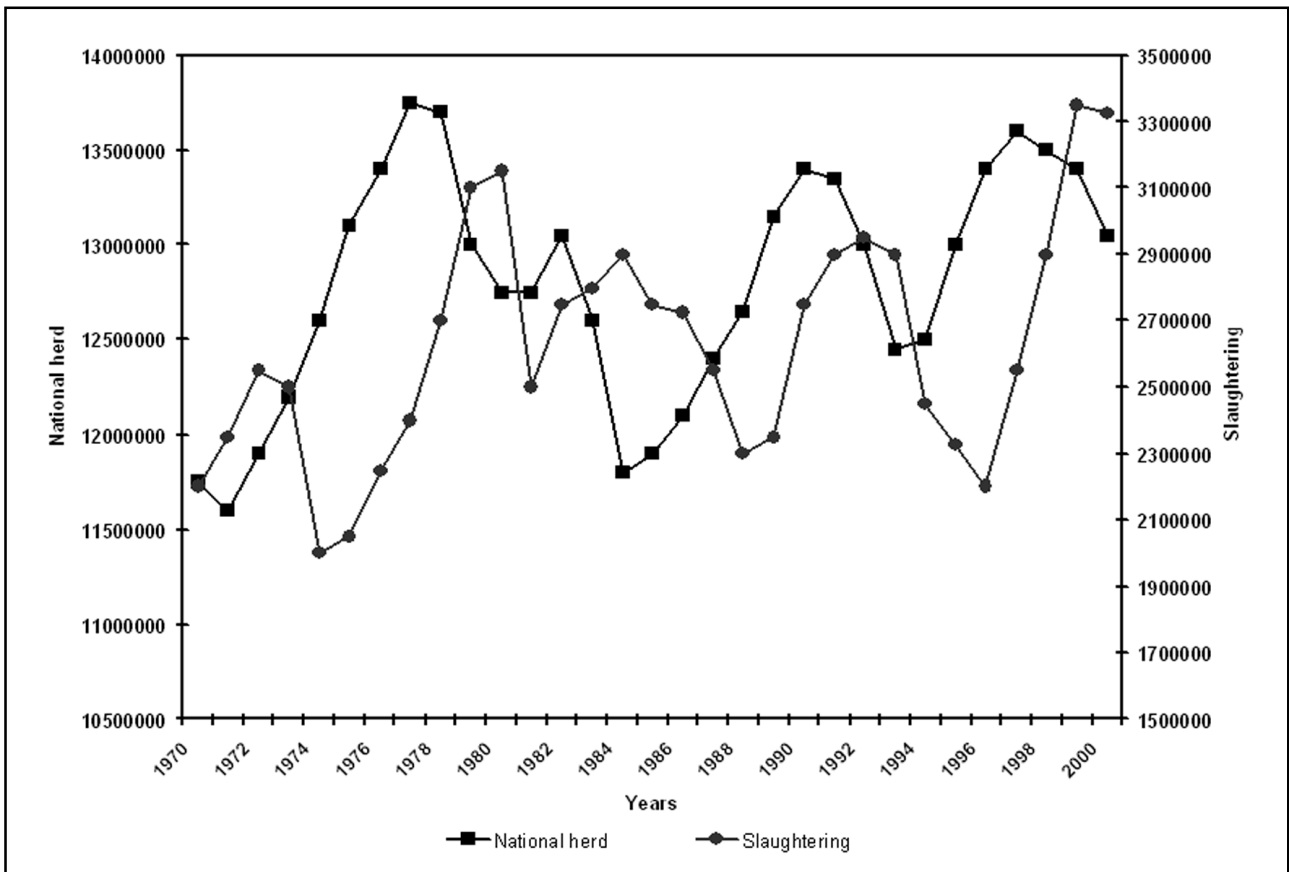


Figure 1: The South African cattle heard and slaughtering (1970 - 2000)

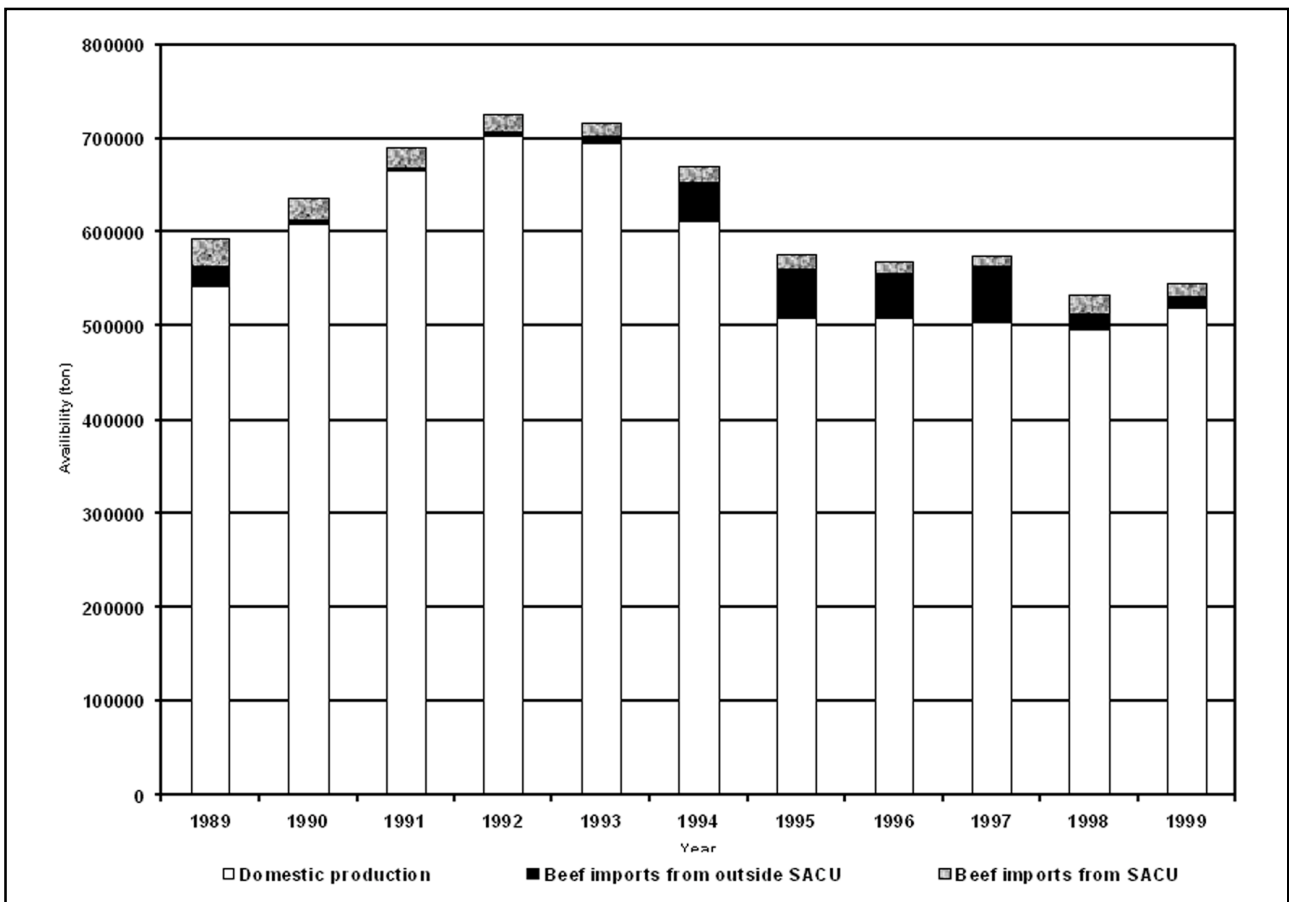


Figure 2: Availability of beef on the domestic market

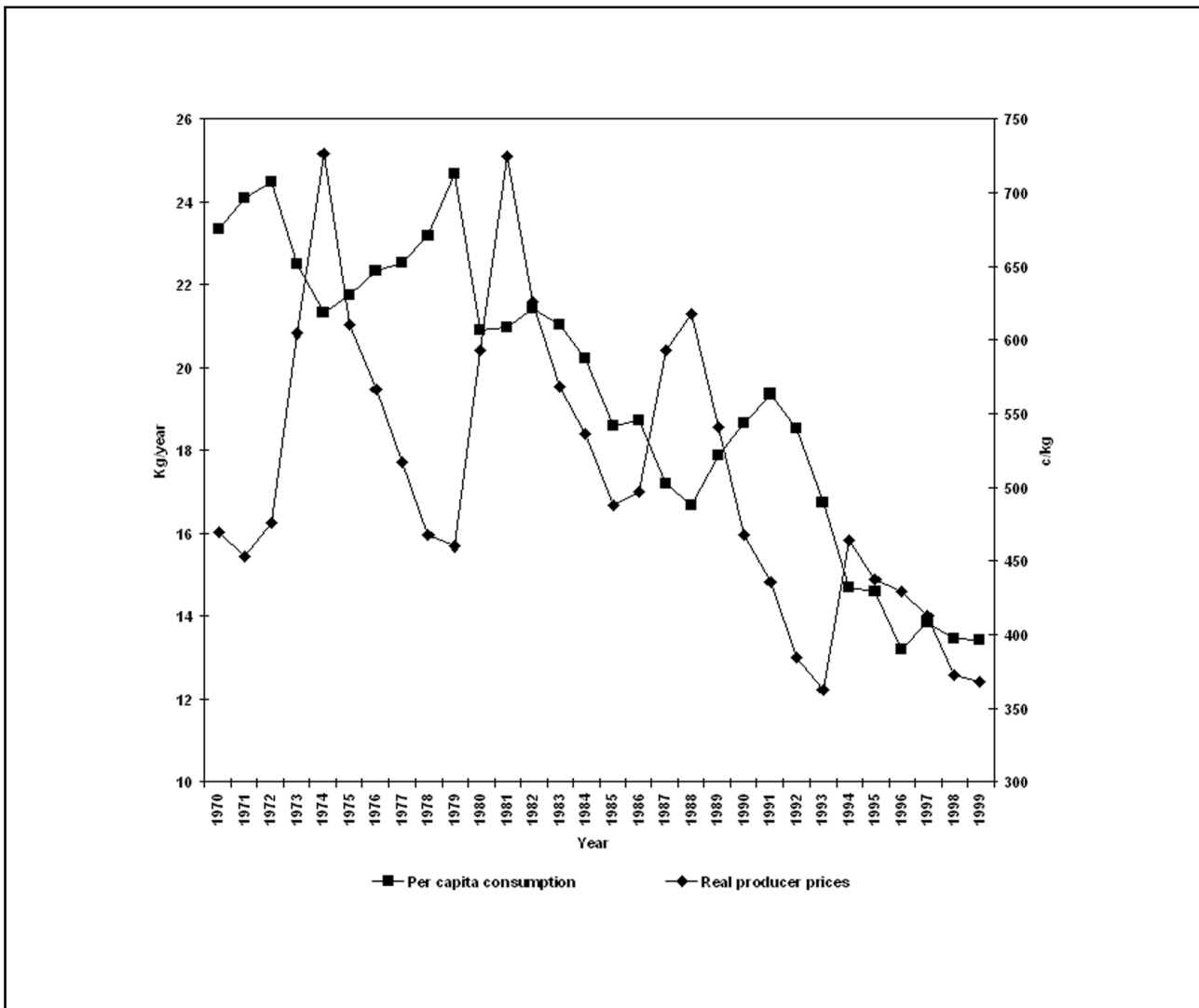


Figure 3: The relationship between the real beef producer price and per capita consumption

## Problems and suggested solutions

This section will highlight the major livestock and meat marketing problems within the emerging red meat sector as expressed by the emerging red meat producers through NERPO. Proposed solutions to these problems will also be provided.

### Livestock Marketing Problems

Unlike the established sector, **livestock in the emerging sector are supplied by many small producers, who are located some distance away from the markets.** Because producers are small and numerous, the marketing functions result in long channels of distribution and marketing. Small-scale producers have high marketing costs.

Marketing infrastructure is considered **inadequate** because of:

- The **absence of infrastructure** such as:
  - livestock auction sale pens,
  - loading and off-loading ramps and
  - road networks within the black communities. This normally results in high marketing costs due to distant sale points. Poor road networks discourage potential buyers to attend livestock auctions or sales.

- **Lack of institutional marketing arrangements.**  
This includes the following problems:
  - lack of marketing agents/organisers,
  - lack of marketing information,
  - lack of value-adding activities within easy reach.
- Because the emerging sector is mostly found within the underdeveloped areas of South Africa, most of the **registered livestock agents are not keen to operate within these areas** due to:
  - poor road networks,
  - high crime rates and
  - low volumes and poor quality animals.

## Challenges

Knowing and understanding local, **regional and national livestock and meat prices**, the **livestock and meat grading system**, **seasonal price movements** and **areas of high/low demand and supply** are crucial in livestock marketing. Because of low levels of literacy and distance from improved technology and communication systems, the majority of the emerging livestock farmers cannot access and understand market information.

With regard to **infrastructure development** such as construction of **sale pens, road networks, and communication technology** which are normally Government responsibilities, **the farmers are advised to use all lobby strategies to convince the Government** about the need to improve marketing infrastructure.

The role of the private sector should be analysed.

### Tips



- ✓ **The formation of livestock cooperatives or commodity groups** where farmers would work together to market their stock, could improve marketing opportunities considerably.
- ✓ **Extension services and other NGOs like Agri-Link** could be used to **assist in connecting potential buyers with sellers** in the absence of registered marketing agents.
- ✓ **Extension services** could be used in **gathering and transferring relevant marketing information in a user-friendly manner** to the emerging livestock farmers.
- ✓ **Commodity organisations, like NERPO, Livestock Marketing Cooperation and Extension Services** could also be used to **support farmer education on livestock marketing issues.**



# Standards and grading

## ***Application of standards and grading as the main factor in the price forming process***

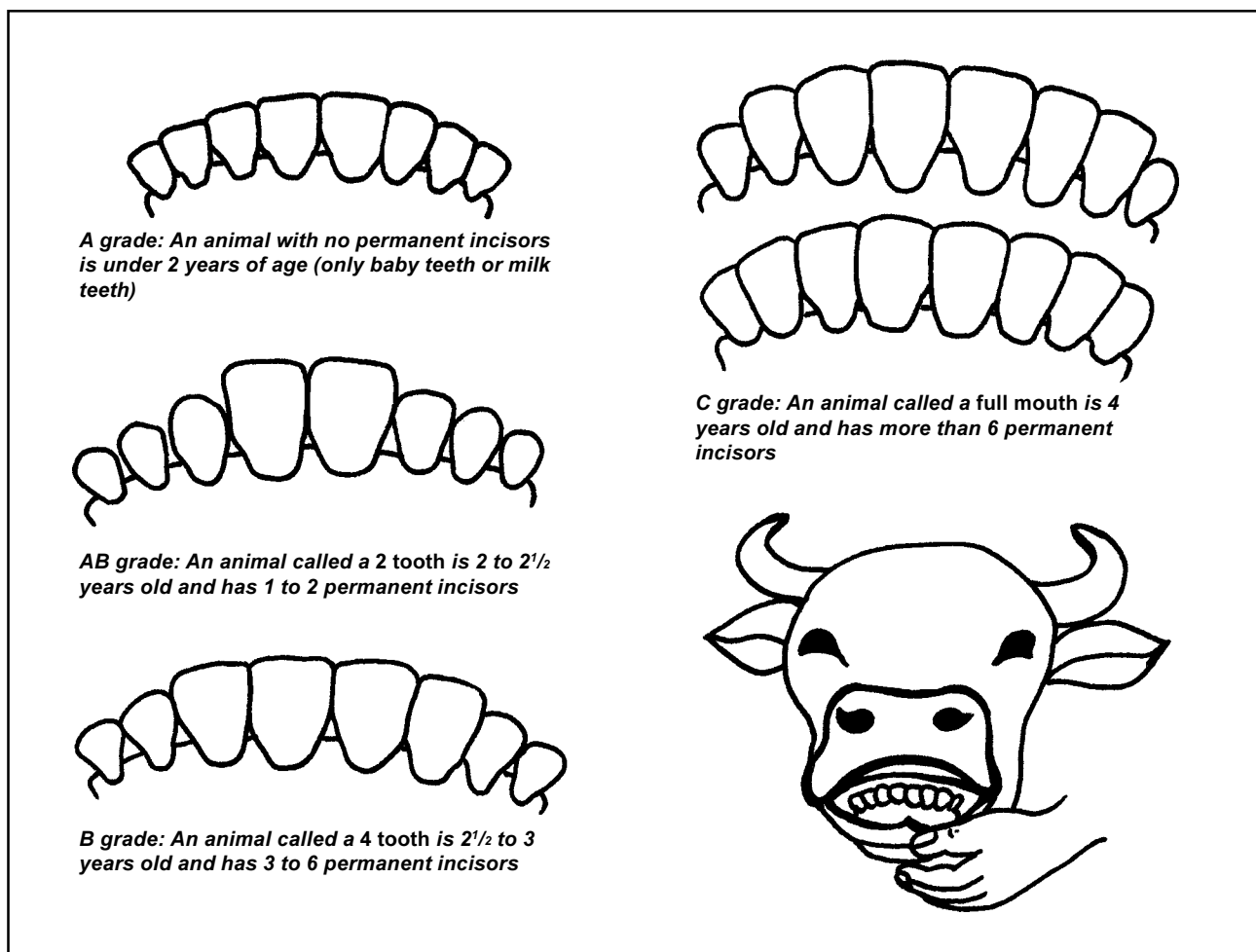
In order to promote, facilitate and perform marketing effectively the requirements with which products must comply are normally laid down by means of preestablished specifications. Manufactured products are standardized, while most agricultural products, including slaughter stock, cannot be produced strictly according to specifications, hence they are classified. The Agricultural Product Standards Act 1990, (Act No. 119 of 1990) and the Meat Safety Act 2000, (Act No. 40 of 2000) provide measures to maintain essential national quality standards and promote meat safety, respectively.

The main purpose of the Agricultural Product Standards Act of 1990 is to divide a heterogeneous product into homogenous **categories (classes) on the basis of their characteristics**, for the following reasons:

- To make it possible to buy by description instead of inspection.
- To facilitate the price-forming process and price reporting.
- To form the basis of marketing communication.
- To ensure that a safe product is made available to the consumer in an orderly fashion.

**Quality and value** are determined by the following physical characteristics of the animal to be marketed:

- Age.
- Fatness.
- Confirmation.
- Damage.
- Sex.
- State of health.



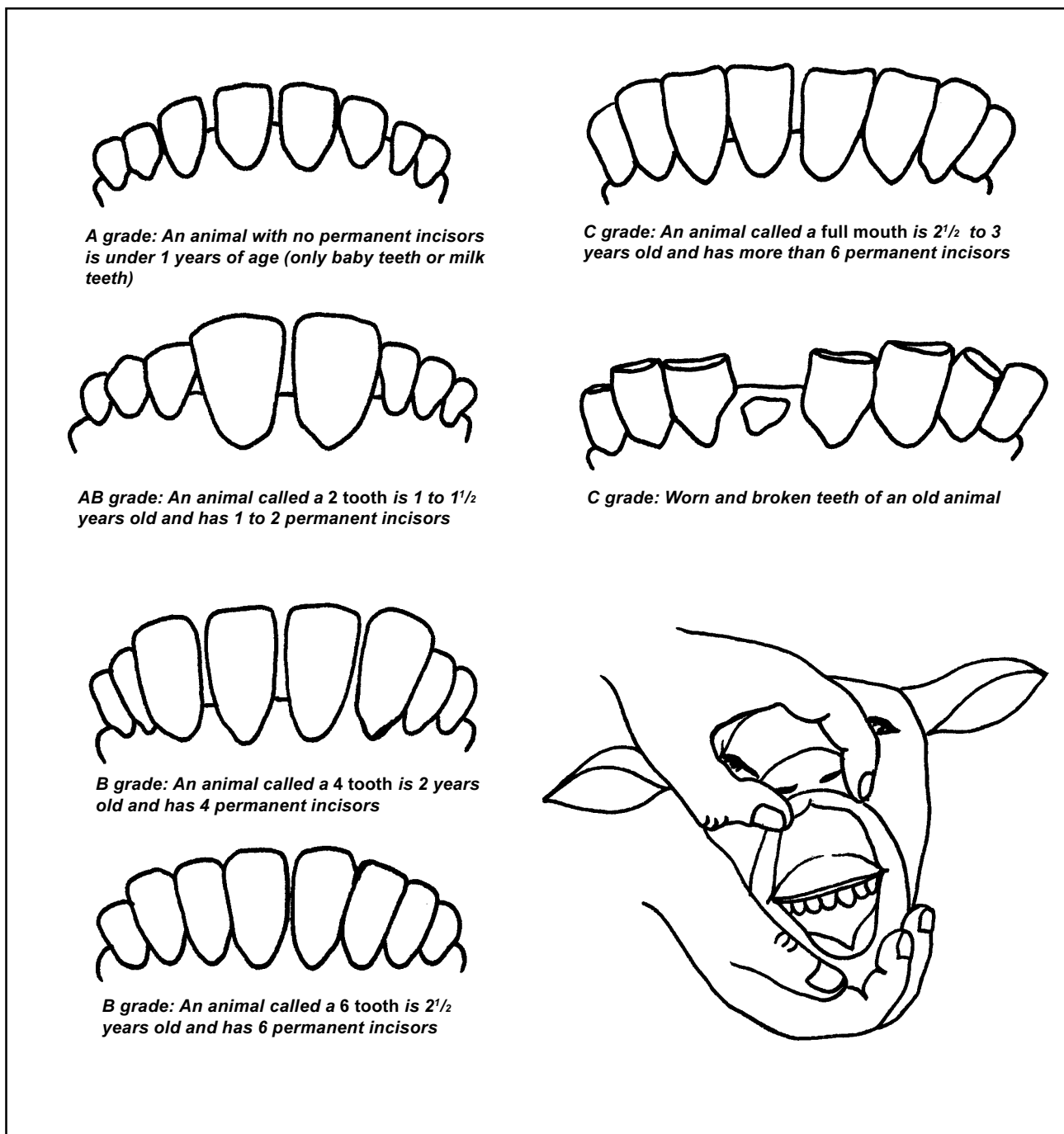
*Estimating the age of cattle*

## Age

Age plays an important role in the choice to buy an animal because the meat of young animals is most tender. To determine how old an animal is, one looks at the number of its permanent teeth. In South Africa cattle and small stock are sorted according to the following four age groups:

- A:** No permanent incisors.
- AB:** One to two (1 to 2) permanent incisors.
- B:** Three to six (3 to 6) permanent incisors.
- C:** More than six permanent incisors.

Based on the general consumer demands and preferences, the ideal age group of slaughter stock is A, AB and B grades.



*Estimating the age of goats and sheep*

## Fatness

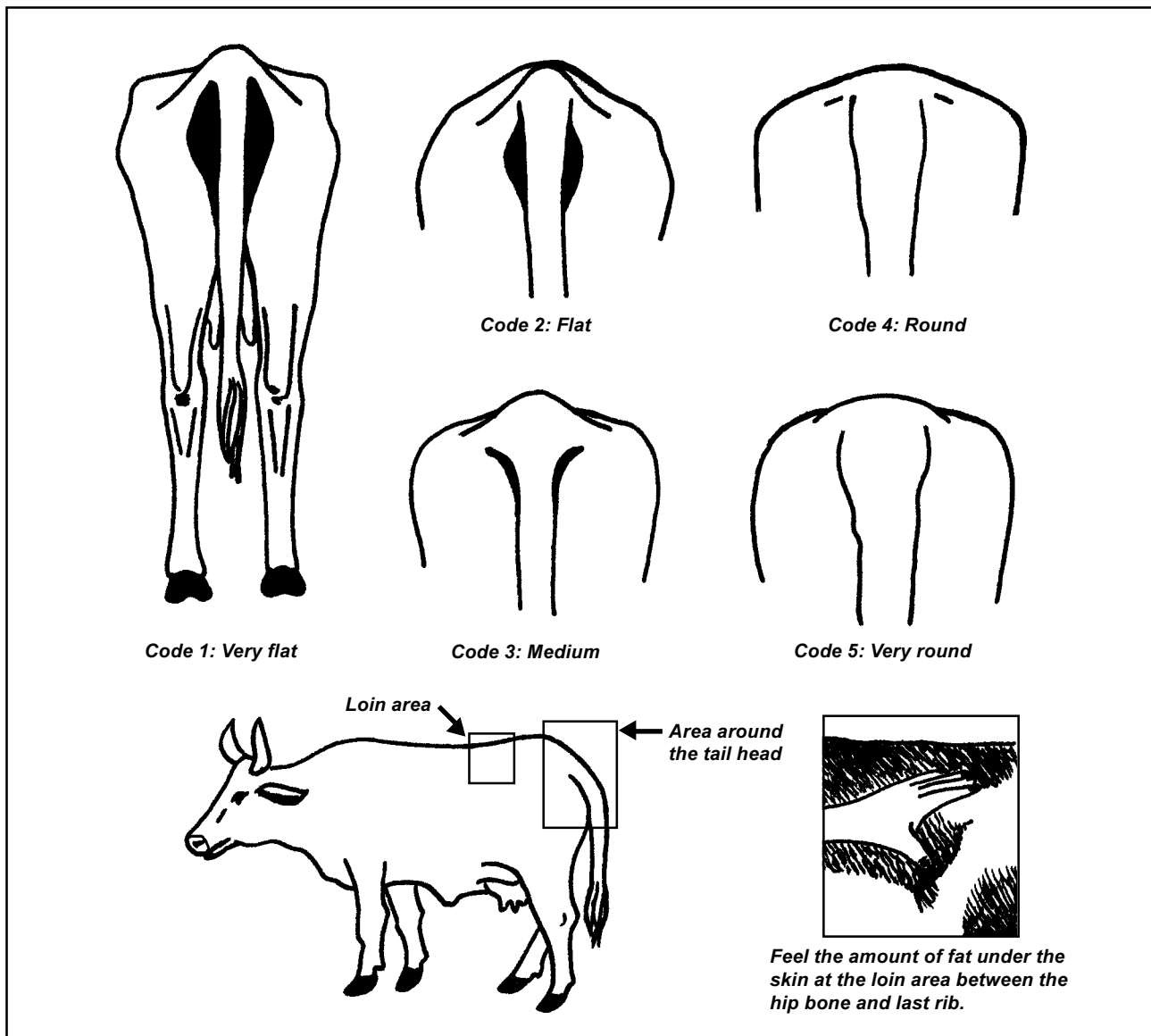
One decides on the fatness of beef, mutton/lamb or goat carcasses by visually judging how much fat is on the carcass. Usually carcasses that have more fat are more juicy and have more flavour to the meat than very thin or lean carcasses. The carcass is divided into a hindquarter, middle section and forequarter. (See Annex B.)

- If an animal has very little or no fat, the meat is called very lean and falls under the code 0 to 1.
- **When an animal is not too lean or not too fat, the meat falls under the code 2, 3, 4.**
- As soon as the animal carries too much fat, the meat will be classified, under code 5 (slightly over fat) and code 6 (excessively or very fat).

## Confirmation

Confirmation is the way the carcass looks and describes the ratio between meat and bone. This is important when one selects animals for the market, for example, to supply the right size of retail cuts. Therefore, the customer prefers to buy cuts of code 3 to 5.

- Code 1:** Very flat
- Code 2:** Flat
- Code 3:** Medium
- Code 4:** Round
- Code 5:** Very round



*Estimating the fatness of cattle*

## Sex

Male animals that have been **castrated** are usually **sold for higher prices** than animals that have not been castrated. Not only is the meat of castrated animals better tasting, it is also fatter.

## Damage

When **cattle are bruised** during handling or transport the producer can **lose a lot of money**. How much damage there is, will depend on the location and depth of the injury. If cattle or small stock carcasses are bruised, it will have an effect on the price when being sold.

For example, if the **fat to meat to bone balance** is

- slightly disturbed, the damage shall be classified as Class 1,
- moderately disturbed, damage shall be classified as Class 2,
- severely disturbed, damage shall be classified as Class 3.

## Disease

Sick animals should not be marketed. The carcass of a **sick animal** is normally condemned and destroyed.

## Specific marketing considerations for the emerging sector

Historically, and until recently the general economy of the African people in South Africa was not about money but about livestock. Hence livestock was and still are kept for the following purposes:

- Various animal traction activities, like ploughing.
- Milk production (fresh and sour milk).
- Breeding in order to get more animals (quantity).
- Use as gift items (Imigido).
- Use as a form of payment for various things, like fines during tribal courts, "Lobola", during African marriages and services rendered during harvesting time.
- Slaughter during traditional ceremonies.
- Use as the main measure of an individual's wealth.
- Household meat consumption only on specific days like Christmas or a visit by an important guest.
- Use as the main form or mechanism for exchange of goods and/or services (currency).
- Use as the form of investment/store of wealth.

Any **surplus stock offered for sale for cash are usually old animals** that can no longer be used for

animal traction activities, breeding purposes or milk production. Slaughtering for traditional occasions also requires fat, fully-matured animals.

### Tip:

*Emerging livestock farmers should be advised to reconsider their reasons for keeping livestock and be further advised to sell through the formal market:*

- ✓ *Animals which are between A and B grades.*
- ✓ *Animals that are not too lean or too fat.*
- ✓ *Castrated animals (steers).*
- ✓ *Healthy animals.*



## Price formation

Before deregulation of the red meat industry, price formation in the formal markets was by carcass auction at the main metropolitan abattoirs. Here carcasses were sold physically by auction and prices were derived directly from these markets. **Currently only Maitland in Cape Town and Port Elizabeth Abattoirs still conduct carcass auctions.**

Currently, **price formation is determined by market forces** based on demand and supply. If the **supply is higher than demand**, the **producer price will decrease** and if the **demand is higher than supply** the **producer price will increase**. Hence prices fluctuate on a daily basis.

The following factors also affect the price of livestock:

- Availability and price of maize.
- Climate (rain, drought or fodder flows).
- Economy of the country.
- Imports of red or other meats.

Because of the seasonal variations in demand and supply, **prices of livestock are normally high during the months of October to December and lowest during the months of January to March.**

**Carcasses** are described according to their characteristics, for example those features that are important to the wholesaler, retailer and consumer when buying or selling their meat. Table 1 shows the average prices paid for the beef and small stock carcasses and live animals.

**Table 1: The average prices paid for the following beef and small stock carcasses and live animals during the past three years have been as follows:**

<b>Beef: prices expressed in cents per kilogram</b>								
Year	Grade A		Grade AB		Grade B		Grade C	
	Average price c/kg		Average price c/kg		Average price c/kg		Average price c/kg	
	Carcass	Live animal	Carcass	Live animal	Carcass	Live animal	Carcass	Live animal
1998	826,4	462,7	-	-	770,4	431,4	721,7	404,1
1999	871,9	488,3	809,3	453,2	789,2	442,0	727,7	407,3
2000	940,7	526,8	869,3	486,8	833,4	446,7	770,7	431,6

<b>Beef: specifications for grades (permanent teeth, fat code, carcass mass)</b>				
	Grade A	Grade AB	Grade B	Grade C
Teeth	No permanent teeth	1 to 2 permanent teeth	3 to 6 permanent teeth	+ 6 permanent teeth
Fat code	2-3	2-3	2-3	2-3
Carcass mass	+200 kg	+ 200 kg	+ 220 kg	+ 220 kg

<b>Small stock: prices in cents per kilogram</b>								
Year	Grade A		Grade AB		Grade B		Grade C	
	Average price		Average price		Average price		Average price	
	Carcass	Live animal	Carcass	Live animal	Carcass	Live animal	Carcass	Live animal
1998	1284,6	719,4	-	-	1122,3	628,5	942,2	527,6
1999	1300,0	728,0	1105,3	619,0	1056,6	592,0	962,3	538,9
2000	1472,7	824,7	1234,2	691,2	1172,6	657,0	1051,1	588,6

<b>Small stock: specifications for grades (permanent teeth, fat code, carcass mass)</b>				
	Grade A	Grade AB	Grade B	Grade C
Teeth	No permanent teeth	1 to 2 permanent teeth	3 to 6 permanent teeth	+ 6 permanent teeth
Fat code	2-3	2-3	2-3	2-3
Carcass mass	13-18 kg	13-18 kg	+ 18 kg	+ 18 kg

Produced from SAMIC statistics, December 2000

## ***Challenges and opportunities for the emerging sector***

With respect to the quality of livestock, the emerging sector is faced with a huge challenge. Based on the sector's general **quality of livestock** and **consumer demand and preferences**, emerging producers are currently not in a position to fetch the best possible price in the formal market because of the following reasons:

- **Age**  
Animals offered to the market are of **mature age** and are normally **classified as C grade** which fetches the **lowest price per kilogram**.
- **Grade (Fatcode)**  
Because of poor grazing, animals offered to the market are **very lean or excessively fat** and fetch the **lowest price per kilogram**.
- **Management practices**  
Because of poor management practices, animals offered for sale are sometimes **neither castrated nor healthy**, hence they normally **fetch low price per kilogram**.

## ***Summary***

If the first commandment in marketing is “**know your customer**” then the second is “**know your product**”. The quality of animals marketed by any farmer or group of farmers is a prime determinant of farm business growth rate and profits. Though the question of how to produce the best livestock for the best market is beyond the scope of this paper, the key point is that **the livestock production system should be able to create adequate market demand for the product**.

## **Target markets**

The **producer/seller** of a **raw material product** sells his/her product (beef cattle, mutton sheep and meat goat) to the **consumer/buyer** through a specific **channel/flow**. The importance and role of the product in the marketing process was previously discussed. We now focus on the target market.

### ***Selecting a target market***

A target market is a group of customers (people or organizations) to whom the seller specifically intends to aim his or her marketing efforts. The **careful selection** and **accurate identification of target markets is essential** for the development of an effective marketing strategy. The following guidelines are normally used in market selection:

- **Match the market opportunity with your business resources.**  
Smaller producers must avoid confronting market leaders. They should rather **focus on niche markets**.
- **Look for a market where the number of competitors are small and their size minimal**  
A producer may enter a market that is already saturated with competition. Only if he has some overriding competitive advantage will he take customers away from existing suppliers.

### ***Relevant examples of market selection***

#### **Example 1**

Commercial goat producers of Southern Namibia have identified a **niche market in KwaZulu-Natal** because of the **Indian community**, which has a high **demand and preference for goat meat**.

#### **Example 2**

Commercial **goat and sheep** producers of the Little Karoo have identified a market **opportunity for grade C animals** in the **black communities of the former Ciskei and Transkei** during the **summer holidays**. The demand for goat and sheep slaughtering are normally extremely high during this period of the year.

**Emerging goat producers of the Eastern Cape and KwaZulu-Natal** could have an overriding competitive **advantage** to sell their goats to the above markets because of **lower transport costs**.

## **Market segmentation**

Market segmentation is the process of dividing the total heterogeneous market for a product into several segments, each of which tends to be homogeneous in all significant aspects. An example of this, is the goat market within the Indian community of KwaZulu-Natal.

The first step is to divide the market into two broad categories: **ultimate consumers** and **business users**. The sole criteria for placement in one or the other of **these two categories is the customer's reasons for buying**.

- **Ultimate consumers** buy and/or use the product for their **own personal or household use** like any traditional feast or occasion. They are satisfying strictly nonbusiness wants and they constitute of what is called the "consumer market".
- **Business users** are business organizations that buy products to use in their own businesses **to make other products**. A feedlot, an abattoir, a meat processing factory and/ or a butchery are all examples of business users. The business users in total constitute the "business market".

The segmentation of markets into these two groups is extremely significant from a marketing point of view because **the two markets buy differently**. Consequently, the composition of a sellers' market mix (product, distribution, pricing, etc.) will depend upon whether it is directed towards the consumer market or business market.

## **Market requirements**

Emerging producers who intend to focus on the business market will have to understand the following:

- Insistence of the product users on **adequate quantities of uniform quality** animals. Huge variations in breeds, age groups and fatness can cause considerable market loss for contractual buyers.
- Adequate quantities are as important as **good quality**.
- **Buyers** in the business market are usually quite **well informed** about what they are buying and the price they are prepared to pay.

## **Major channels of livestock marketing**

In the red meat industry there are five possible channels that a farmer can use in marketing his livestock. These channels are fully described below.

### **Channel 1: Livestock marketing agents**

Facilitators that render a service of **bringing together a buyer and a seller**, without them actually owning the livestock, but **actively assist in the transfer of ownership** from the producer to the next customer. Their activities include **arranging live auctions at regular times at strategic points**. Producers bring livestock to auction pens where transactions take place between buyers and sellers facilitated by the auctioneer. **Auctions are arranged by marketing agents on a commission basis**. Auctions play an important role in livestock marketing, and they are the **principal sales outlets for live animals**.

Auctions are performed by auctioneer companies, of which Vleissentraal, Stock Owners and Karoo Ochse are the largest. Sales of animals at auctions are done on the hoof. The basic functions of the auctioneer are:

- To advise buyers and sellers of auctions and to advertise his/her auction.
- To ensure that an auction takes place, and runs smoothly.
- To classify the stock on the hoof according to type, age, etc.
- To promote the attendance of buyers at respective auction points.
- To duly mark with paint the stock that has been sold.
- To see to the herding and loading of stock.
- To organise labour to help with selecting and heading off of cattle.
- To apply the laws governing the selling of live animals at auctions.

The auctioneer is entitled to a commission from the sale proceedings (paid by the seller or buyer). The **success of auctions depends on the number and type of animals and participation of buyers**. The different kinds of buyers are individuals buying for household use, butchers and speculators/agents. The livestock and meat-marketing agents operating in South Africa have an association called the South African Federation of Livestock Auctioneers and Meat Brokers (SAFLA – MB).

## Agricultural cooperatives

A substantial number of agricultural cooperatives and companies are involved in livestock marketing, primarily acting as brokers or agents.

## Transactions by means of liaison services

Agents bring buyers in touch with sellers on a commission basis. At these auctions the sellers are paid by the agent immediately or within five days.

## Speculators

A number of speculators are active in South Africa. **Livestock are purchased by speculators** who take ownership and sell animals at a profit. In livestock marketing speculators occupy important positions. They **buy livestock directly from farmers** and also at auctions. Marketing transactions performed by speculators do not take place at a fixed place. They either take place at the farmer's house, local government offices or at the extension officer's place. When marketing animals through speculators, **farmers do not have marketing costs. Transportation costs**, the major costs involved in livestock marketing, are **incurred by the speculator**. The advantage enjoyed by speculators in this case is that there is **no commission charge involved. Prices are reached through negotiation**.

**Speculators are perceived by farmers to be dishonest and to treat farmers badly.** They are seen as employing a range of tricks in their effort to convince farmers to sell livestock to them, such that at the end farmers who desperately need money will let their animals go even though not satisfied with the price they are getting.

## Channel 2: Feedlots

**Extensive livestock** producers have a second option of selling their animals **directly to feedlots**. South Africa has a well-established feedlot industry. There are currently about 60 commercial cattle feedlots and 10 sheep/lamb feedlots registered under the South African Feedlot Association (SAFA). These feedlots market their animals throughout the year, have a standing capacity of  $\pm 320\ 000$  animals and slaughter around 70 percent of the commercial sector's annual 2 million cattle slaughtered at registered abattoirs. **Feedlots normally buy weaner calves with live mass of 230 kg** from extensive cattle farmers **and add 105 kg carcass mass through intensive feeding** of about 100 days, eventually slaughtering an animal at 215 kg carcass weight.

## Channel 3: Abattoirs

South Africa has well-developed abattoir facilities at its disposal. The sizes of abattoirs vary from large to very small units. Some of the large abattoirs have until recently been controlled by a government parastatal called ABAKOR Ltd., which was sold to the public in October 2000.

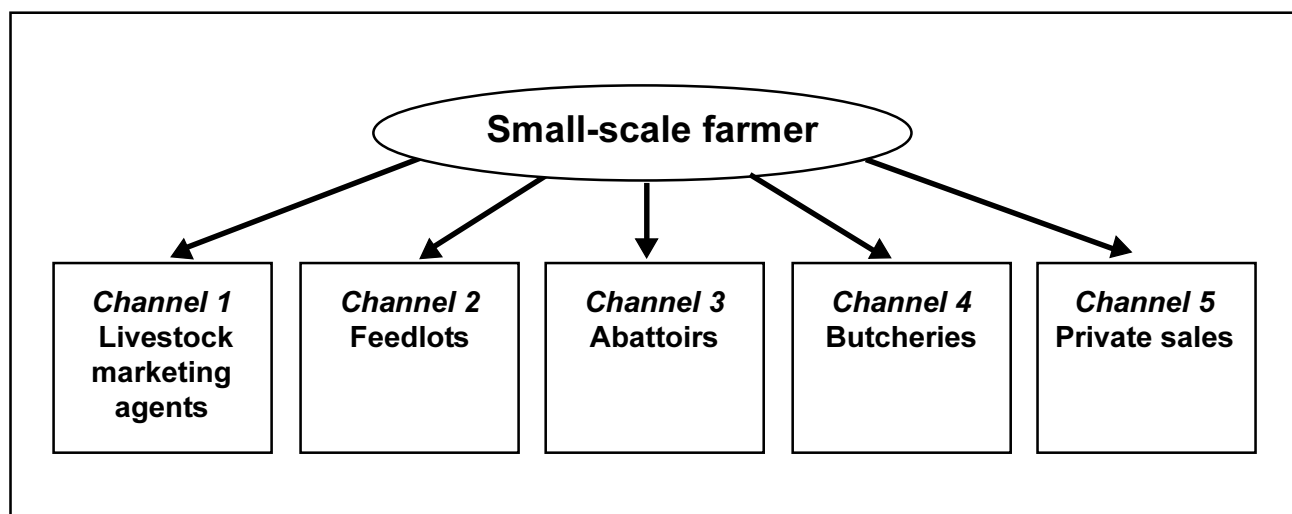


Figure: Major channels of livestock marketing

Visual aid 1

A significant number of abattoirs are operated as private ventures. These abattoirs differ in size and are located all over the country. Since deregulation of the South African red meat industry in 1993, a **rapid growth** in the number of **registered abattoirs** was experienced, namely from 330 in 1993 to 460 in 1999 and there are now more than 480 abattoirs nationwide. Total slaughter capacity at registered abattoirs currently is estimated at 16 500 slaughter units per day (one slaughter unit either equals one head of cattle, or 15 heads of small stock). It is also estimated that abattoirs nationally operate at about 60 percent capacity utilisation. During the regulated era the abattoir sector largely only offered a slaughter service. Since deregulation, **the abattoir sector fulfils an integrated wholesale function by buying animals on the hoof and directly selling carcasses and meat cuts to the retail sector.**

Carcass auctions are still held at two abattoirs. At these abattoirs buyers and sellers meet through the intervention of a marketing agent. The Red Meat Abattoir Association is currently the mouth piece of all its members.

### ***Channel 4: Butchers***

Another available option to farmers is to sell their stock directly to the butchers, which also play an important part in the marketing of cattle in developing regions. Butchers enhance the marketability of livestock by acting as buyers in their own right and by acting as buyers at auctions as well. **Good prices and farmers having a strong bargaining power** in determining the prices of their stock, are the main reasons for some farmers' satisfaction with sales to butchers.

### ***Channel 5: Private sales***

The **shortest, simplest, and the most popular option**, especially amongst smallholder livestock owners, is private sales **directly to the ultimate consumer**. This method occupies an important position in the livestock marketing arena of the emerging sector. Private sales include individuals buying livestock for different reasons. The most important are bartering and cash sales. Livestock are bought for slaughter, as an investment or social functions such as funerals, customary celebrations, weddings and religious celebrations.

Due to the important functions livestock perform in African societies, there exists a market for livestock amongst individuals and individual households. Private buying **is important to farmers as they are in a position to determine the prices for their animals**. Farmers **do not incur any marketing costs**. Private sales are therefore the cheapest and probably also the **simplest form** of market outlet. However, **demand is irregular with high demand during certain times of the year, like festive seasons**.

### ***Factors affecting the selection of a marketing channel***

The choice of marketing channels depends largely on the following factors:

- Availability of the market.
- Price offered in the market.
- Distance to the market.
- Potential or size of the market (bulk purchase).

Research has found that out of the five major channels described above, the **emerging producers generally prefer to sell their livestock through public auctions, organised by reliable auctioneer agents**. The main reasons for this preference are that:

- Public auctions are normally available at the right time.
- They normally pay reasonable prices which are market related.
- Stock can be sold in bulk.
- Social and economic relationships can be built.
- The farmer, if not satisfied with the price, has an option of returning his/her animals back without any penalty, except transport costs.

The **second preferred marketing outlet is informal sales** amongst community members, including butchers.

The main reasons for selection of this outlet is that:

- Prices are negotiated on a willing-buyer, willing-seller relationship.
- Convenience with no added costs like transport or commissions.

**Abattoirs are not very popular** marketing outlets within the emerging sector:

- Abattoirs are normally located some distance away from the producers.
- Payments are received a few days or sometimes weeks after the animal has been sold.
- There is a high risk factor of animals being condemned on the basis of health status.
- Price is based on the quality of the carcass, not the outward appearance of the animal.
- Many charges that reduce the price of the animal are levied.
- It is not economical to sell one or two animals as transport costs will be high.

## ***Legal considerations***

In terms of the Animal Health and Animal Identification Acts, **nobody may dispose of any animal through the formal market without his registered brand mark on the animal.** When purchasing livestock the buyer must obtain a valid identification certificate from the seller, this certificate must always accompany the animal being sold. For further details farmers must contact their nearest police stock theft unit branch.

A **veterinary stock movement permit** is also needed when livestock are moved from one area to another. This permit must accompany the animals. For further details on this farmers must contact the nearest state veterinary office.

## ***General concluding comments***

**Consumers are increasingly becoming aware of issues such as feed additives, residue levels,** and the use of **agro-chemicals**, as well as **animal welfare** matters linked to the various production and processing systems in the country. They are beginning to ask questions about the food on their plate, how and where it was produced and how it was processed. It is therefore **becoming very important to be able to positively trace the origin** of the animal or animal product.

Tracing the product to the farm of origin is compulsory in Europe. All imports of animals and animal products are subject to the same basic rules. Namibia and Zimbabwe have already introduced traceability systems as they have quotas under the Lomé agreement and exports of animal products to these countries may soon be subject to the rules of origin as well.

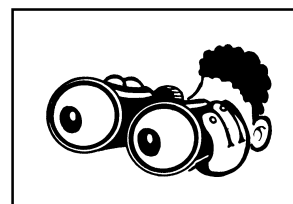
As the **need for information from the retailer grows**, there will be **increased pressure on producers to give assurances** that are closely linked to the origin of the product. These assurances need to be verified through a recognised system and it is here that the existing animal identification system can play a major role.

Used effectively and correctly, **traceability can become a powerful marketing aid.** It can be used to identify and **guarantee products such as grass-fed beef, feedlot beef, Karoo mutton and milk produced from pastures.** It can also be used to verify the **health status** of a herd and can be linked to issues such as residue levels in milk and milk products.

Using the total system as a management aid, breeders and producers will be able to identify differences within a breed with regard to meat quality and other traits.

According to *Pick 'n Pay's* national executive officer there is a **weekly demand of 2000 AB grade carcasses produced in a natural way.** On the packages of these meats the words "**country reared**" appear. To be part of this scheme producers must **register** their farms with a **study group of South African Natural Beef. Only meat that is free of growth stimulants, hormones and antibiotics are accepted.**

# Focus points for the extension officer



## ***What the extension officer needs to know***

- The problems of livestock marketing for emerging farmers.
- The alternative marketing channels open to emerging farmers.
- Typical prices for livestock and what factors effect these prices.
- The grading and quality standards of livestock.
- The names and addresses of abattoirs, owners of feed lots, agents, auctioneers, transport companies, major producers and organizations like NERPO.

## ***What the extension officer can do***

- Mobilize farmers into livestock commodity groups. These commodity groups can be used to lobby local and provincial government to build auction pens, they can be used for training and capacity building, group marketing and transport.
- Guide a farmer when he starts grading his livestock.
- Provide regular information regarding various markets and prices.
- Link farmers with abattoirs, owners of feedlots, agents, auctioneers, transport companies, major producers commodity organizations and projects.

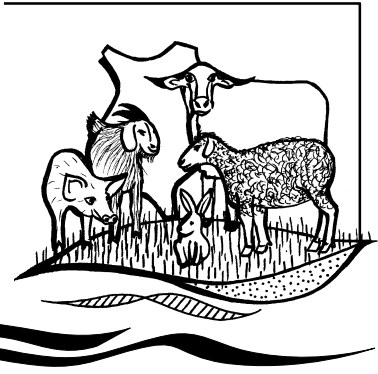
## ***Strategies for the red meat producer***

The following table gives a summary of the strategies for the red meat producer.

<b>Market</b>	<b>Opportunity</b>	<b>Weakness</b>
Link with the funeral undertakers.	This is a guaranteed weekend market for people who are capable of selling $\pm$ 10 animal units per week.	There must be a constant supply otherwise the market can easily be lost.
Organic Beef.	Increasing demand from consumers in developed countries and markets for beef that is raised entirely naturally.	Need proper accreditation and high quality meat for sale into luxury export markets.
Buy male calves from dairy farmers for feeding and sales.	Cheap to buy. Suitable strategy for producer with limited land. Opportunities to obtain high prices for male animals in the informal sector.	High level of management skills and commitment. Potentially high levels of mortality.
Supply to informal meat traders in Townships.	Grading is not a problem. Lower grades can fetch better prices because of consumer preferences.	Risk of meat hygiene.
Link with or own specific abattoirs.	Prices could be manipulated through supply of slaughter stock.	Requires high quality and safe meat.

Other rural-based enterprises capable of supplying additional income for a small African farm.

<b>Market</b>	<b>Opportunity</b>	<b>Weakness</b>
Feedlots, abattoirs, meat and meat products for wholesaling and retailing.	Opportunities for added value in marketing chain and sales to Government organizations and major retailing chains.	Requires high levels of managerial and entrepreneurial skills.



## Section II

# Pig Marketing

## The evolution of the marketing system in South Africa

### *Deregulation and liberalization*

A Liquidation Committee replaced the Meat Board at the end of November 1997. The Meat Forum, Meat Industry Trust and the South African Meat Industry Company (SAMIC), a Section 21 Company, were established.

**South Africa has always been a net exporter of pork** with only a specific shortage in spareribs and back fat. Because import parity prices are higher than local prices, imports have been mainly limited to these two products, except in 1994 when import tariffs were temporarily reduced to zero to allow other imports.

Since the deregulation of the maize industry, maize prices have changed dramatically on a regional basis and now fully reflect transport costs. It can thus be expected that **pork production will tend to move towards the maize production areas where maize is cheaper**. These may also include neighbouring states such as Zambia and Zimbabwe.

### *Legislation*

Like the other red meat products, pork was subject to a surplus removal system in the past, when marketing was regulated. Controlled and uncontrolled areas existed, with the flow of meat being controlled within the controlled areas. Meat from uncontrolled areas was granted permission to come into the controlled areas, but the abattoir had to comply with certain regulations set by the Meat Board.

Since the deregulation of marketing, the whole structure has changed. Currently, the marketing of pork is free with an import tariff applied to all pork products from outside the SACU.

The ratification of the Marrakesh Agreement introduced a whole new era of trade relations between countries. As with all other industries the red meat industry had to comply with the Agreement on Agriculture (AoA). One of the main features of the AoA is the abolition of all quantitative import controls and the replacement of these with tariffs.

### *Impact of market liberalization*

Since the liberalization of the international market in 1994, imported poultry became the cheapest animal protein and pork prices drifted down to poultry import parity prices. However, with the weakening of the exchange rate and higher duties, imported poultry prices increased, which supported pork prices.

**Cheap imports of poultry off-cuts remain the largest threat** to domestic animal protein. These cuts are mixed with domestically produced poultry and offered at very low prices to the consumer. These special offers put a lot of pressure on the pork industry in South Africa.

**Pork producers need to differentiate their products** from others in order to establish better prices for themselves.

# Overview of the marketing system

## Operation of the market in South Africa

Traditionally South African pork producers were able to compete with overseas pork producers. This is emphasised by the fact that the tariff applicable to pork imports is lower than for beef and mutton. Furthermore, **imports of pork mainly consist of spareribs and back fat of which South Africa has a shortage**. On the domestic market, things are also going pork producers' way in the sense that **per capita consumption of pork has remained stable over the past decade**, unlike other red meats where consumption has declined.

**Recent years have also seen large investments in the industry**, e.g. computerised feeding and environmental maintenance equipment, better disease control by improving the housing environment, etc. This, of course, means that producers making these investments cannot merely leave the industry when times are tough. **Conversely, it also means that it is difficult for small-scale producers to enter the industry.**

## Marketing channels

There are basically five marketing channels for producers to sell their livestock:

- Public auctions.
- Abattoirs.
- Speculators.
- Processors or butchers.
- Local communities.

The **choice** of marketing channels depends largely on the following factors:

- Availability of the market.
- Price offered in the market.
- Distance to the market.
- The potential of the market (bulk purchase).

The **majority of the pigs produced** in the country **are marketed on a contract basis** (70 percent plus). This implies that **processors sign production contracts with producers** in order to ensure a certain level of intake as well as a specified quality. Processors buy pigs on a contract basis from the farmer and sell the pork and processed meat to wholesalers, retailers and directly to the public.

An **informal market** also exists for pigs, especially **in the rural areas** where live pigs are traded on an informal basis. Pigs are normally marketed in the rural areas **on specific days**. One specific day is the so-called "pension day" when farmers sell pork to pensioners who have just collected their pension money. This is actually on a vendor basis. Farmers also sell pork on the same basis 14 days prior to pension day. They grant credit to pensioners, but they collect their money on pension day. Small-scale farmers need to be aware of the specific day in their particular areas to market their pigs on an informal basis. In order to be able to sell pork on credit to pensioners, a good record-keeping system needs to be in place.

With regard to small-scale farmers, one of the **major barriers when marketing to processors is the adherence to quality**. However, there are small-scale farmers who deliver very effectively on a contract basis to processors. Their delivery batches are in the order of 20 to 40 pigs per delivery.

Producers can also **market their pork directly to the public** if they have their **own slaughtering facilities**, which must comply with the regulations set by the Department of Health.

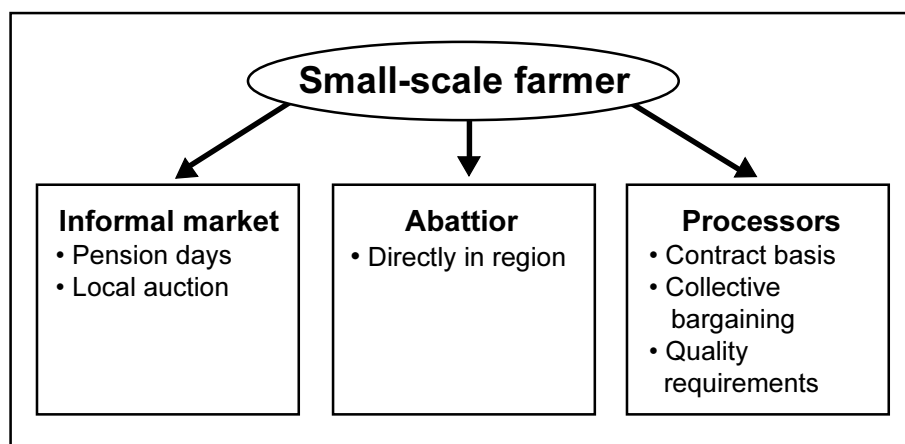


Figure 1: Marketing flowchart for small-scale pig producers

Visual aid 2

The figure shows the different marketing channels followed by a small-scale farmer.

Although large investments are needed there are no major reasons why small-scale farmers cannot have access to the commercial side of pig marketing. The factors that influence pig marketing are the same for commercial and small-scale farmers. The various processors have different quality requirements and contracts can be arranged with them. Under the supervision of the Pig Veterinarian Association and contractors of the South African Pig Producers Organization (SAPPO), small-scale farmers are guided in the production process of pork.

### Price determination

Carcass auctions played an important role in the price determination of pork in South Africa. Since ABAKOR (Abattoir Corporation) went bankrupt, many abattoirs have been forced to close down. The prices realised at the centralised carcass auctions of ABAKOR were seen as barometers for the pork industry. However, these auctions have been reduced substantially to those held in Port Elizabeth and Cape Town only. The result is that these auctions are no longer regarded as a sufficient gauge of prices in the market as far as contracts are concerned. **There are still producers using the open market auctions to market their animals**, e.g. those in Port Elizabeth and Cape Town. Hence, it is **important for these producers to know how pigs are classified, what the price is for different classes** and how many animals were slaughtered. (See Table 1.)

**The majority of pigs sold in South Africa are sold by means of contracts.** For this reason a new system of price reporting and grading was introduced that specifically caters for contract sales. (See Table 2). Both price reporting and grading systems have significance for the small-scale farmer, depending on where and how pigs are marketed.

**Table 1: Typical carcass auction results and classification of pork**

Mass Class	Lean meat % class	Number	C/kg
<b>Weaner</b>		<b>15</b>	<b>868</b>
<b>Class P</b>			
V	P	1	943
W	P	10	1014.5
X	P	82	1056.4
Y	P	115	1144.3
Z	P	99	1089.7
<b>Total Class P</b>		<b>307</b>	<b>1098.3</b>
<b>Class O</b>			
V	O	5	968
W	O	65	999
X	O	179	1043.5
Y	O	66	1084
Z	O	80	1026.1
<b>Total Class O</b>		<b>395</b>	<b>1038.5</b>
<b>Class R</b>			
V	R	1	899
W	R	43	968
X	R	95	1008
Y	R	44	1057.4
Z	R	20	955
<b>Total Class R</b>		<b>203</b>	<b>1004.5</b>
<b>Class C</b>			
V	C	2	911
W	C	18	937
X	C	31	958
Y	C	6	975.2
Z	C	2	801
<b>Total Class C</b>		<b>59</b>	<b>946.4</b>
<b>Class U</b>			
V	U	0	0
W	U	2	860
X	U	4	844
Y	U	0	0
Z	U	0	0
<b>Total Class U</b>		<b>6</b>	<b>849.3</b>
<b>Class S</b>			
V	S	0	0
W	S	1	737
X	S	0	0
Y	S	3	749
Z	S	0	0
<b>Total Class S</b>		<b>4</b>	<b>746</b>
<b>Sausager</b>		<b>17</b>	<b>668.3</b>
<b>Pig Total</b>		<b>1006</b>	<b>1033.4</b>

**Table 2: Example of weekly pork price and grading reporting system for contract sales**

MASS < 60 kg (Porkers)					MASS 81-90 kg (Heavy baconers)				
Class	Units (number)	Price c/kg	Values Rand	Average mass (kg)	Class	Units (number)	Price c/kg	Values Rand	Average mass (kg)
P	549	892	226 778	46.3	P	17	767	10 974	84.1
O	104	876	45 610	50.1	O	94	805	60 550	80
R	20	714	7 153	50.1	R	84	761	51 360	80.4
C	0	0	0	0	C	29	634	15 028	81.7
U	0	0	0	0	U	0	0	0	0
S	0	0	0	0	S	7	604	3 678	87
<b>Total</b>	<b>673</b>	<b>883</b>	<b>9 541</b>	<b>47</b>	<b>Total</b>	<b>231</b>	<b>758</b>	<b>141 591</b>	<b>80.9</b>
<b>Total P/O</b>	<b>653</b>	<b>889</b>	<b>272 388</b>	<b>46.9</b>	<b>Total P/O</b>	<b>111</b>	<b>799</b>	<b>71 525</b>	<b>80.6</b>

MASS 60-80 kg (Light baconers)					MASS >90 kg (Sausager)				
Class	Units (number)	Price c/kg	Values Rand	Average mass (kg)	Class	Units (number)	Price c/kg	Values Rand	Average mass (kg)
P	3 982	777	2 050 144	66.3	SAS	356	601	307 755	143.8
O	6 107	767	3 243 711	69.2	SAB	22	279	11 254	184
R	2 462	738	1 293 553	71.2	<b>Total</b>	<b>378</b>	<b>578</b>	<b>319 009</b>	<b>146.1</b>
C	561	631	255 314	72.1	<b>Average pork producer price</b>				
U	137	586	59 525	74.2	Average	14 572	750	7 658 393	
S	41	532	16 004	73.3					
<b>Total</b>	<b>13 290</b>	<b>755</b>	<b>69 118 251</b>	<b>68.9</b>					
<b>Total P/O</b>	<b>10 089</b>	<b>771</b>	<b>5 293 855</b>	<b>68.1</b>					

Note: Prices in c/kg and average mass in kg.

Carcases weighing less than 60 kg are regarded as Porkers.

Baconers are classified as light and heavy. Lights weighing between 60 and 80 kg and heavies between 80 and 90 kg.

Carcases weighing more than 90 kg are classified as Sausage pigs.

Source: SAPPO (South African Pig Producers Organisation).

## Classification

Pork is classified according to the:

- **PORCUS system** and also
- **weight of the carcass (mass classes).**

**PORCUS is based on the percentage lean meat per carcass e.g.:**

- Class P has the highest percentage lean meat and therefore receives the highest price.
- Class S will receive the lowest price due to its high fat content relative to the other grades. (See Tables 1 and 2.)

The **mass classes** on carcass auctions are divided into 5 classes, namely V, W, X, Y and Z.

- V and W are considered as Porkers because they have a lighter weight (e.g. <60 kg).
- X, Y and Z are heavier and are to considered as Baconers (e.g. 60 – 90 kg).
- The price reporting system in Table 2 reveals the number of pigs slaughtered per class (units), the weighted price received for the specific class in c/kg, the total value of the number of pigs slaughtered as well as the average mass in kilograms. The reporting system reports prices on a weekly basis. **Table 2 represents the different classes of pigs slaughtered in a specific week** by the participants.
- These prices are contract prices, based on supply and demand conditions and are available from SAPPO. The average producer price represents all classes and is a weighted average.
- Weighted prices are reported in the market. These prices contain carcass auction prices and prices as reported by the various role players in the market. Figure 2 shows the relation between baconer, porker and import prices.

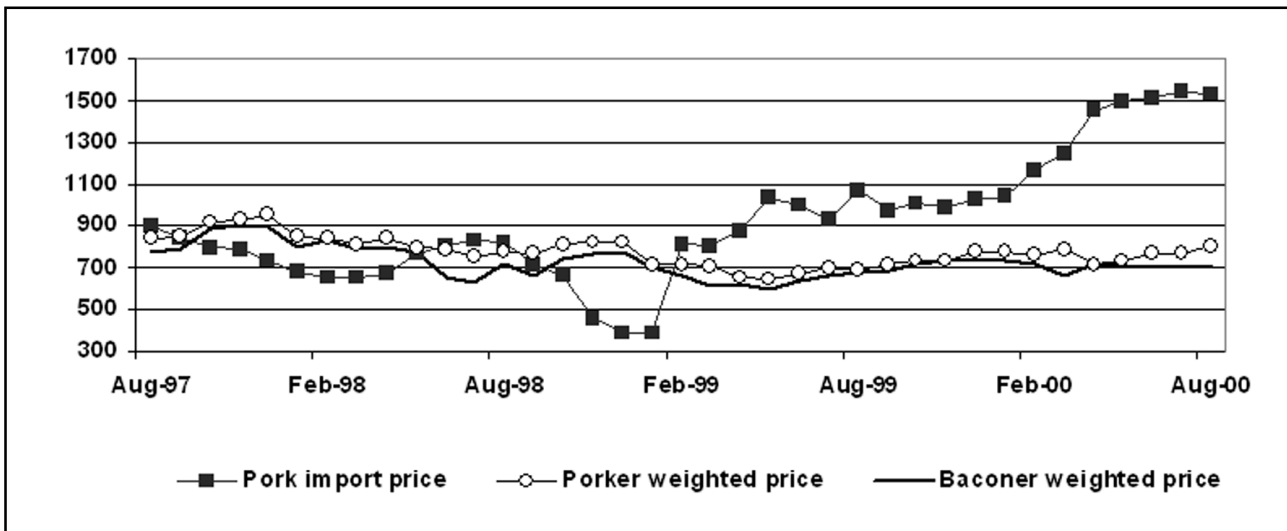


Figure 2: Pork price trends in South Africa and the relation with import prices. Source: CIAMD, 2000

- **Whenever domestic prices tend to increase, imports tend to increase.** This has important implications for domestic pork producers since any expected increases in domestic pork prices will be dampened by increased imports. A factor that does, however, count in the favour of domestic pork producers is the weak Rand, but low international prices may erode this advantage.
- Since the pig industry is highly intensive, the **profitability** of the pork producer **depends on the prices of the end product and that of yellow maize.** Yellow maize contributes **almost 80 percent to the feed costs** of a pork enterprise.
- In times when yellow maize prices are high, pork producers experience profitability problems. This has a definite influence on the long-term viability and sustainability of a pork enterprise.
- Figure 3 shows the seasonality of pork producer, porker and baconer prices. **Pork prices tend to decline during the first half of the year, then bottom out and increase towards the end of the year.** Thus, on a

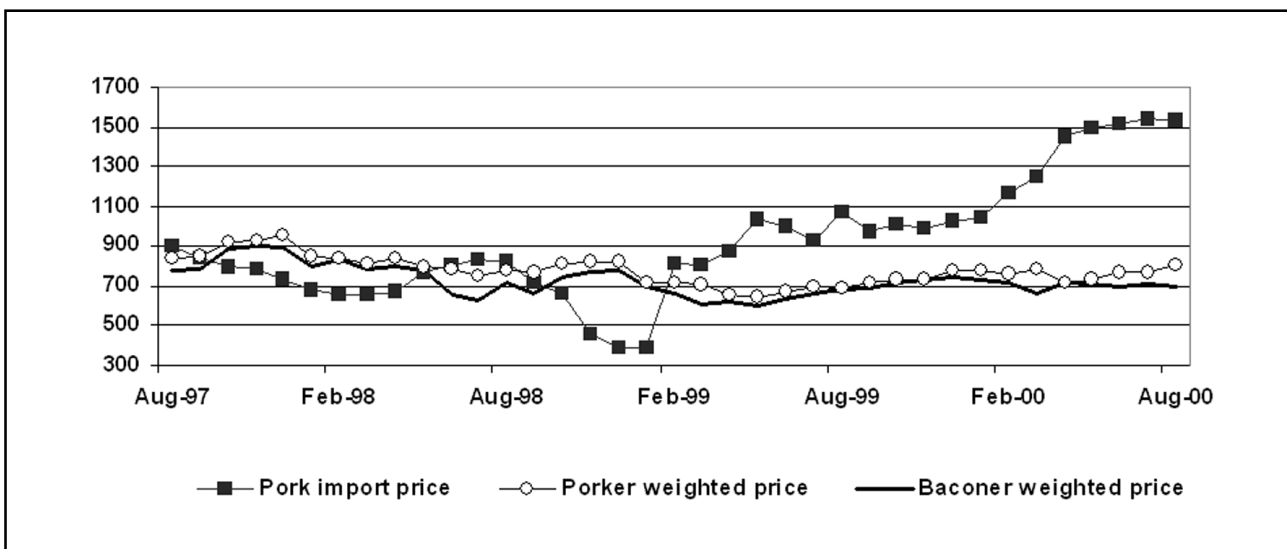


Figure 3: Real seasonal pork price variations. Source: CIAMD, 2000

<sup>1</sup> The Real price is the price after taking into account the impact of inflation. For example, if the price of pork is R800 c/kg and the inflation rate is five percent, then the real price compared with last year is:

$$\frac{800 \times 100}{105} \quad \text{or} \quad R762$$

For more information on the treatment of inflation, see "Understanding and Using Market Information" Marketing Extension Guide No. 2, Marketing and Rural Finance Service, FAO, Rome, Italy.

year-to-year basis producers can expect real prices<sup>1</sup> to move lower until July after which real prices will improve again. This has various implications on the marketing of pigs for the producer. Prices start to increase from September, especially in the case of sausagers. The main reason for this is because processors must start to accumulate processed meat stocks for the December season. **Fresh meat prices**, in other words porkers and baconers, normally **peak in November/December** due to the relative higher demand at the wholesale level, once again to make sure ample stocks exist for the festive season. Meat prices normally **decline from January to March** due to the increase in seasonal supply and a weaker demand. The reason for the weaker demand is the spending power of consumers decreases after (normally) overspending in the festive season.

## Small-scale farmers and the pig market

### *Requirements/considerations to enter the market*

- It is a **very capital-intensive** business especially when starting from scratch.
- It is **necessary to close contracts** in order to make sure that you have a market for your product.
- **Quality is very important.** Capital is needed to produce good quality products.
- **Skills/training.** It is necessary to have knowledge about pig production.
- **Hygiene** is very important, big buyers are very strict on this.
- **Good quality feed** is needed to obtain good results.
- **Buy good quality animals**, as poor quality would reduce profit margins.

### *Issues that affect/restrict small farmer access in the pig industry*

- It is not easy for a new, small, pig farmer to break into the market. “**Buyers**” **tend to be wary of newcomers** because they are not sure of the quality, and whether a new producer can supply pigs on a sustainable basis.
- Small producers are at a disadvantage because they **do not have the same bargaining power** as large units, unless they can bargain on a collective basis.  
There is a lot of potential for **collective bargaining**, which can introduce scale **advantages to small-scale producers**.
- A good way of marketing **small numbers of pigs** would be to make contact with **local butchers or meat buyers**, but this can only be done **if the pigs are slaughtered at a reputable abattoir**.

## Adding value

### *Opportunities*

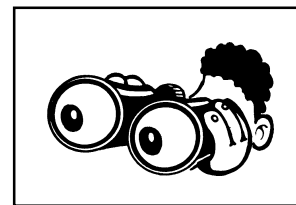
- Sausage pigs are used in the processing industry in the making of **sausages, polony**, etc.
- Baconers are used in the production of **bacon**, some meat used for the fresh meat market and part of the carcass is also used in the processing industry.
- Porkers are mainly used for meat sold in the **fresh meat market**.

### *Barriers*

- **Establishing of a market** in which the processed products can be sold.
- **Large amounts of capital are needed** to establish processing plants.
- One also needs to have **access to a relatively large sustainable supply of pigs** in order to keep the processing plant running at optimum capacity.

**Producers from the same region could collaborate in order to raise such a processing plant and ensure sustainable supply** of the correct animals. This process entails research in terms of what the market needs and when the market needs it. This will determine the quality and the amount of the pigs to be bought for the processing unit.

# Focus points for the extension officer



## ***What extension officer needs to know?***

- What the market potential of the region is with regard to pig production?
- What forms of transport are available to transport pigs to the market?
- Does a market for pigs exist in the immediate environment and what are the requirements in terms of quantity and quality?
- On what basis are prices determined in the region, e.g. derived from prices paid by the nearest processing plant, live animal auctions or carcass auctions in/near the region?
- What are the veterinarian issues with regard to production when producing for processors? The ideal production circumstances for extensive pig production in terms of pastures and possible additional feeding.
- Where is the closest available yellow maize for feeding purposes?
- What is the contact number of the nearest SAPPO agent who assists small-scale farmers in the region?
- How are regional pork prices affected by increases in the availability of other substitute products such as chicken, imported animal protein, etc?

## ***What the extension officer can do?***

- Arrange a meeting with existing and prospective producers to assess the current situation with regard to pig numbers in the region.
- Contact SAPPO (012) 322 6980 in Pretoria to find out about available agents.
- Arrange meetings with processors such as Estcourt and Pork packers to find out about contract specifications.
- Get hold of statistics to determine the seasonal price trends in the region.  
Arrange pig farmer days to discuss the marketing of pigs on special occasions in the region, referring to pension days and other days when people gather in town.
- Find out what are the prices in general paid for pigs in the region.  
Contact SAPPO or any other statistical department to verify the relevancy of the prices paid to farmers.
- Find out about the possible markets for the marketing of pigs.  
Contact marketing agents and other role players to establish links between the farmers and the industry.
- Contact the Pig Veterinarian Association at SAPPO and arrange short courses on the production of pigs on small-scale level.
- Contact the nearest grain producer or silo owner to find out about the availability of yellow maize for additional feeding to pigs.
- Contact the extension officer of Grain SA in your region to help with the production of additional feed for pig production.
- Get involved in training programmes for farmers by means of farmer days.  
Invite hawkers, marketers to address farmers and discuss their requirements.
- Form farmer groups in a region to help with the transfer of knowledge to individuals and to other groups.
- Establish a good relationship with farmers in the region in order to secure trust and willingness to cooperate.

## ***Strategies for the pig producer***

The following table gives a summary of the strategies for the pig producer.

<b>Market</b>	<b>Opportunity</b>	<b>Weakness</b>
Informal market	Selling of pigs to people on pension days in the region. Provide transport for pensioners when they buy pigs. Local auctions held for livestock.	Buyers do not always have transport for animals. Distance to pensioner's home. Buyers are poor. Small number of buyers result in weak demand.
Abattoir	Collective transport to abattoir. Always a market for pigs.	Poor quality results in low prices. Transport cost may be high. A small number of animals increase transport costs per unit.
Processors	Contract marketing could be established. Constant supply and income inflow. Collective bargaining for prices. Assistance on correct production and nutrition procedures to ensure quality production.	Contract specifications must be met. If not, legal steps could be taken. Prices vary according to fundamental aspects. Income therefore not always constant. Subject to capital intensiveness and payback ability could sometimes be in jeopardy. Could take a long time to establish production and quality skills. If processor closes down, new markets need to be found.



# The potential for marketing rabbits and cane rats

## Classification

### Rabbits

Rabbits are generally classified according to size, weight and type of pelt. Small ones weigh about 1,4 to 1,8 kilogram at maturity, medium breeds 4,1 to 5,4 kilograms, and large breeds 6,4 to 7,3 kilogram. Rabbits can be classified further according to production for fur and meat. The two most popular breeds for meat production are the New Zealand and Californian, while the Rex and the American Chinchilla are for fur production.

### Cane Rats

As cane rats are bush animals, the determination of cane rat biomass always raises difficult problems. The cane rat weighs, on average, between 1,8 kg and 2,5 kg. A giant cane rat can weigh between 6 and 10 kg.

## Products

### Rabbits

- **Manure**

The manure of rabbits has the potential to make excellent compost since it is rich in organic matter and nutrients. Rabbit manure used as a plant fertiliser is superior to other sources of manure due to its unique composition.

- **Meat production**

Production of one kilogram of rabbit meat requires only one quarter of the feed energy needed to produce the same amount of lamb or beef and only 70 % of the feed required for the equivalent quantity of pork. Thirty percent more feed energy is needed to produce one kilogram of rabbit meat than required for the same amount of chicken meat, but rabbits have the economic advantage of thriving on feeds rich in roughage while poultry does not.

- **Skins**

Rabbit skins are more a by-product of meat production particularly in intensive production systems. However, rabbit skins are a major component in the international fur trade, with large numbers also being used for the manufacture of hats, trimmings and gloves.

## Advantages of micro-livestock production and marketing

Micro livestock have advantages which are promising for the people who, being largely outside the cash economy, are unable to purchase meat, milk cheese or eggs. These people can afford only animals that **can be raised within the home or back-yard under ambient climatic conditions and on feeds that are cheap and easily available.**

### Economic advantages

A subsistence farmer is likely to benefit more from small species than from large because of several factors:

- The animals are less expensive to buy.
- They are less of a financial risk to maintain.
- They give a faster return on investment.
- They provide flexibility.
- They provide a steadier source of income.
- They increase the chances of successful breeding because greater numbers are usually kept.
- They are more easily transported.
- In some cases they are more efficient converters of food energy.

There are other benefits attached to small species:

- **Efficient use of space**

The space required for handling and feeding micro livestock is proportionately less than that required for large animals. Small space requirements make many micro livestock available to landless rural inhabitants.

- **Cheaper facilities**

Facilities and equipment required for micro livestock are smaller and simpler than those required for large animals.

- **Ease of management**

Farmers and villagers can manage small animals more easily than large, which is an advantage in the many places where women and children are the main keepers of livestock.

- **Feeds**

In general small species tend to expand the food base. Most of these small species can be raised on feeds that people discard, e.g. kitchen wastes.

- **Reproduction**

Many small animals have high reproductive capacity with short gestation periods, large number of offspring and rapid juvenile growth. They also tend to reach sexual maturity at a younger age than large animals, and the interval between the generations can be very short.





