

**Marketing information needs of smallholder livestock
farmers in the Moretele area in the Bojanala Platinum
District Municipality of the North West Province**

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SUMMARY OF THE DISSERTATION

The smallholder livestock farmer in South Africa is in a difficult position, not only grappling with a changing global environment, but at the local front, without access to domestic markets. This is due to very limited knowledge of buyer requirements emanating from lack of marketing information. This limits adequate access to livestock markets by smallholder farmers in South Africa and more specifically in the Moretele area of the North West Province, resulting in limited growth and less disposable income.

Some of the problems facing the smallholder livestock farmer are a lack of understanding of buyer requirements regarding livestock product characteristics, industry price determination processes, alternative marketing channels and how to promote livestock.

Empowerment and equitable access to markets by these farmers can only be realised when knowledge is disseminated and training and capacity building is enhanced. It is especially an understanding of what the market requires, how price determination occurs and how marketing channels and promotional tools are used in the livestock industry that is lacking.

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CHAPTER 1: BACKGROUND TO THE STUDY

1.1

INTRODUCTION

The agriculture sector contributes approximately 3,5% to the national Gross Domestic Product (GDP), while the agricultural processing sector accounts for another 9%. The sector employs between 10-11% of the South African labour force. There are approximately 45 818 commercial farming units in South Africa, a decrease by 12 162 since 1993. It is estimated that there are about 240 000 small-scale farmers who provide a livelihood to more than 1 million of their family members and occasional employment to another 500 000 people. These farmers supply local and regional markets where large numbers of informal traders make a living. (The Strategic Plan for South African Agriculture 2001: VII).

In 2001, a strategic sector plan for South African agriculture was developed by the key stakeholders, namely, Agriculture South Africa (AGRI-SA), an umbrella body for organised commercial agriculture, the National African Farmers Union (NAFU), representing mainly black smallholder farmers and the Department of Agriculture. The vision was to create a united and prosperous agriculture sector. In order to realise the vision, the sector developed core strategies to provide equitable access and participation, global competitiveness and profitability and sustainable resource management. For the farming community, complementary advantages from this development are good governance, integrated and sustainable rural development, knowledge and innovation, international cooperation and safety and security. (The Strategic Plan op. cit. III - IX).

The Broad-Based Black Economic Empowerment in Agriculture policy was developed to guide black economic empowerment within the sector as a key component of implementing equitable access and participation in accordance with the Strategic Plan for South African Agriculture. (Broad-Based Black Economic Empowerment Framework for Agriculture 2004:2). It provides precision to commitments and

responsibilities for greater participation and equitable access in the sector, while promoting the goals encompassed in the Government's Broad-Based Black Economic Empowerment policies and legislation.

Broad-Based Black Economic Empowerment (equitable access and participation) in agriculture means economic empowerment of all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated social and economic strategies , plans, principles, approaches or acts that include but are not limited to:

- increasing the number of black people that manage, own and control enterprises and productive assets
- facilitating ownership and management of enterprises and productive assets by communities, workers, cooperatives and other collective enterprises
- human resource and skills development
- achieving equitable representation in all occupational categories and levels in the workforce
- preferential procurement and
- investment in enterprises that are owned or managed by black people (Broad-Based Black Economic Empowerment in Agriculture 2004).

It should be noted, however, that this policy will work, especially on the preferential procurement principle, only when farmers in general and more specific smallholder farmers, are able to meet buyer requirements operating under the auspices of a free market economy.

1.1.1 THE SOUTH AFRICAN AGRICULTURE SECTOR AND THE SMALLHOLDER FARMER

A smallholder farmer can be described as a commercial farmer who in addition, is a beneficiary of one of government's land reform programmes and is mainly dependent on the state or semi-state organisations for support and finance. (Department of Agriculture, Forestry and Fisheries. 2009: Definition and characterisation of farmer categories). The so-called emerging farming sector is regarded as part of this definition.

Given the past political background, the smallholder farmer is in a difficult position not only to grapple with global competition, but is also not able to access domestic markets due to very limited knowledge of buyer requirements emanating from lack of marketing information. These farmers are hardly geared towards having marketing plans and strategies focusing on their target markets. There is therefore a need to investigate this lack of knowledge to be in a position to facilitate access to this marketing information.

Adequate access to relevant marketing information that is user-friendly and relevant remains a problem to the smallholder sector including the smallholder livestock farmers. This challenge limits adequate access to livestock markets by smallholder farmers resulting in limited growth and less income realised by these farmers.

During the launch of the Agricultural Marketing Information System, (Launch of the Agricultural Marketing Information System: 20 February 2007), the former Minister of Agriculture and Land Affairs mentioned that the South African government deregulated agricultural markets and liberalised trade, in line with global trends. This policy shift ensured that South African farmers could export a range of agricultural products to the rest of the world and use the benefit created by expanded market access to expand their farming operations. However, a challenge

arising out of the new trading and marketing dispensation is that farmers are now required to become business-minded entrepreneurs who are able to take decisions in terms of what to produce, how and for whom to produce, in line with contemporary market requirements.

The Minister mentioned that the ability of farmers to respond intelligently to the production and marketing challenges rests on their ability to access, interpret and apply basic agricultural marketing information in their businesses. It has however, been observed that the fees charged for accessing the required agricultural marketing information is, in most cases prohibitively high and not affordable, particularly to the resource-poor smallholder farmers, thus leaving them with no option but to dispose of their produce at uneconomic prices.

For example, the South African Red Meat Abattoir Association distributes weekly sales in each abattoir to its members only. Any other person would be charged around R60.00 per week for this information. For the smallholder farmer, this would not be affordable. www.rmaa.co.za.

The South African Meat Industry Company (SAMIC) was another important source of livestock marketing information. For one to access this information, one needed to have access to the Internet. Another complication is that due to a general lack of exposure amongst this group, the marketing information was also too complicated to interpret www.samic.co.za.

The availability of prompt and reliable marketing information on what is happening in the market and what prices are quoted for different commodities are seen as necessary to improve the decision-making capability of the farmers and strengthens their bargaining power.

1.1.2

THE SOUTH AFRICAN LIVESTOCK INDUSTRY

Livestock can be described as all domesticated animals, especially sheep, goats, cattle and pigs intentionally reared in an agricultural setting for food and fiber or for breeding purposes. Livestock may be raised for profit or subsistence. Raising animals (animal husbandry) is an important activity in modern agriculture which is being practiced in many societies. The South African livestock industry accounts for nearly 50% of the Agricultural Gross Domestic Product (Statistics South Africa 2002: Agriculture Census Report no 11- 02- 01).

It is estimated that the previously disadvantaged or smallholder farmers also known as resource poor farmers in South Africa own between four and five million herd of cattle (up to 40% of the national herd). Despite owning about 40% of the national livestock herd, smallholder livestock farmers are mainly livestock keepers as they hardly get meaningful returns for their animals. The productivity of these animals is generally low as they rarely find their way into lucrative commercial outlets such as feedlots and abattoirs. Buyers from the commercial sector are reluctant to buy cattle owned by resource-poor farmers, mainly on the premise that these animals are poor in traits of economic importance such as class and carcass characteristics (Livestock Development Strategy 2006).

Tregurtha of ConMark Trust (Macanda. P. September 6. 2006. Rural farmers vital to sector. Sowetan: 25).mentions that smallholder farmers own more than 2 million heard of cattle with an asset value of more than R3 billion, but they do not realise the return on investment because they do not have access to appropriate marketing information which would provide them the opportunity to increase turnover and make a viable living out of their farming activities.

Again, the Accelerated Shared Growth Initiative in South Africa (ASGI-SA) highlights that although livestock is an attractive product to increase growth in the sector, its potential is not realised because of, among other reasons, limited participation of the smallholder farmers in mainstream economic activities. One of the key barriers identified is the inadequate access to marketing information. (Monitor Group. 21 February 2006. Agriculture's contribution to ASGI-SA: 21).

Knowledge and understanding of livestock and meat prices, seasonal price fluctuations and movements and areas of high and low demand are crucial in livestock marketing and are key aspects of the marketing information needs of the smallholder farming community.

Because of lack of exposure and distance from improved technology and communication systems, resource-poor livestock farmers cannot access and understand price information. This limits participation by these farmers in mainstream marketing activities.

Careful selection and accurate identification of target markets is essential for the development of an effective livestock marketing strategy for the smallholder farmer. There is a further need to segment the market between ultimate users who buy livestock for own personal use and business users such as feedlots, abattoirs and meat processing organisations. Out of a few marketing channels available, resource - poor farmers still prefer to market their livestock through public auctions and informal sales. There is therefore a need to provide regular information to the resource-poor farmer regarding alternative markets which will hopefully increase the profitability and return on capital invested in livestock.

Niche markets have been identified, for example, for certain breeds of livestock kept by the smallholder sector. A good example is the re-emergence of the ancient Nguni cattle breed that is giving the

smallholder livestock farmer a new opportunity. The Nguni breed is indigenous to Southern Africa and very common among black smallholder farmers. For many years, commercial livestock farmers looked down at the traditional Nguni cattle breed. Due to its diminutive almost stunted physical conformation they believed the Nguni breed had little or no value as a source of beef. But the world has changed. Meat that contains a high fat content is now increasingly frowned upon by consumers. Organically produced foods, free of pesticides, etc., like the Nguni breed are now increasingly gaining a high premium price in the market. The Nguni breed is hardy, with virtually no input costs, lean, with very little fat content, its beautiful hides are also much sought after.

In 2004, the Industrial Development Corporation (IDC) in partnership with the Limpopo Department of Agriculture and the University of Limpopo Experimental Farm launched the Nguni Cattle Initiative. The project's long term goal is to develop an international niche market for organically produced beef. The partnership also joins the North West, Eastern Cape, the Northern Cape, Free State and the Mpumalanga provinces in raising the prominence of the indigenous species. (Nufarmer & African Entrepreneur 2008).

On the local front, there is also a very high demand and preferences for goat meat, commonly kept by the smallholder farmer community, from the Indian community in KwaZulu-Natal.

According to the Agricultural Product Standards Act of 1990, the quality and value of livestock are determined by considering the physical characteristics of the animal which are age, fatness, confirmation, damage, sex and state of health. For example a Grade A animal has no permanent incisors (has only baby or milk teeth) and is under two (2) years of age. An AB grade animal has one (1) or two (2) permanent incisors and is two (2) or two and a half (2½) years of age. A grade C

animal is three (3) years old and has more than six (6) permanent incisors.

Age plays an important role in the choice to buy an animal because the meat of young animals is most tender. South African red meat consumers prefer grades A, AB and B. Smallholder farmers normally keep Grade C animals, these animals normally fetch the lowest prices in the market because of the toughness of the meat. However, there is a great marketing opportunity for Grade C animals in certain parts of South Africa during the summer holidays when young boys go through circumcision. Smallholder livestock farmers located in these areas have an overriding competitive advantage to sell their animals to these consumers because of lower transport costs.

From a development point of view, being guided by the Agriculture Sector Plan and the Broad-Based Black Economic Empowerment in Agriculture, this state of affairs needs strong intervention. This intervention requires putting a strong emphasis on ways to disseminate such needed information to ensure optimal access to address skewed participation in mainstream markets by the smallholder livestock farmers.

It is also very critical to understand the demographic character of the farmers to be in a position to disseminate the much needed information in the most effective way. Use of contemporary communication technology including cellphones as an information source has been widely supported, the feasibility of alternative information and communication technologies will have to be explored.

1.1.3 LIVESTOCK FARMING IN THE MORETELE AREA OF THE BOJANALA PLATINUM DISTRICT MUNICIPALITY - NORTH WEST PROVINCE

There is an estimated 1.816 million herd of cattle in the North West Province (approximately 12% of the national herd). Approximately 30% of this herd is in the hands of smallholder farmers. The off-take rate from this sector is estimated to be between 5-8% which is extremely low. (North West Department of Agriculture 2003). Again, the North West Province has 9% of the goat population (approximately 586 000) of South Africa. Approximately 86% of this goat population is in the hands of smallholder farmers. (Agricultural Economics Standing Committee. March 2006.

Moretele is a local municipality located in the Bojanala Platinum district of the North West Province. Moretele is known to have a sizeable number of smallholder livestock farmers. These farmers have also benefited from state programmes including land redistribution. Though the farmers continue to receive some kind of support in other areas such as access to land, finance and animal husbandry, huge problems are still experienced in accessing mainstream markets. The area is not far from Pretoria, which could be an accessible market for these farmers.

This study therefore aims to research the level and extent of lack of knowledge of marketing information by smallholder livestock farmers of the region of Moretele in the North-West Province.

1.1.4 MARKETING INFORMATION SYSTEMS (MIS)

A Marketing Information System is defined as a system in which marketing information is formally collected, stored, analysed and distributed to managers in accord with their informational needs on a

regular planned basis. The system is built on an understanding of the information needs of marketing management, and supplies that information when, where and how the manager requires it. Jobber (2004:89). As stated above, this is the type of information that the smallholder livestock farmer in the Moretele area in the Bojanala Platinum District Municipality lacks.

The use of a MIS in the development of livestock marketing strategies, by the smallholder livestock farmer located in Moretele will therefore be the focus of this study.

Jobber (*op. cit*) opines that the MIS comprises four elements which are the:

1.1.4.1 INTERNAL CONTINUOUS DATA

Businesses possess an enormous volume of marketing and financial data that may never be used for marketing decision-making unless organised by means of a MIS. One advantage of setting up an MIS is the conversion of financial data into a form usable by marketing management.

For example, in the livestock industry, the Red Meat Abattoir Association (RMAA) compiles a price marketing information system. The RMAA was founded in February 1991 as an independent membership-based organisation. Prior to the deregulation process, the abattoir industry comprised mainly larger high throughput abattoirs. The deregulation process created an increase in the number of abattoirs to over 500. These events led to the need for current and up to date price information and market values from these abattoirs, www.rmaa.co.za.

The RMAA initiated the development of the price information system with a database of historical and current prices, to create and maintain an information system containing relevant and historical data essential

for planning and development purposes. The primary objective is to timeously release accurate and valid information at an acceptable cost. The price information report is released once a week. All participants are required to send their prices on a weekly basis to the RMAA before 12:00 on a Monday afternoon. All price information is handled in a confidential manner and may not be used for any purposes other than the development of the price information system.

Prices are analysed and a report compiled, which is distributed to all participants via fax or electronic mail. This price information is just as relevant to the smallholder sector as it gives out information on the weekly prices of the various grades purchased by and sold to buyers. Smallholder farmers, just like other livestock farmers need the information to take informed decisions on whether or not to sell their livestock and how much to expect for their livestock in a certain period.

1.1.4.2 INTERNAL AD HOC DATA

Organisational data can also be used for a specific (ad hoc) purpose. Capturing the data on the MIS allows specific analyses to be conducted when needed. Smallholder farmers can make informed decisions by having access to prices offered by abattoirs, depending on the various grades, and selling trends of certain grades of livestock in the market. This price information is, unfortunately, only available to subscribers, for example, the Internet-based SAMIC newsletter. www.samic.co.za.

1.1.4.3 ENVIRONMENTAL SCANNING

Although often amorphous in nature, environmental analysis whereby economic, social, technological, legal and physical forces are monitored, should be considered part of the MIS. Smallholder farmers can make informed decisions by having access to prices offered by abattoirs, depending on the various grades, and selling trends of certain

grades of livestock in the market. This price information is, unfortunately, only available to subscribers, like for example, the Internet-based SAMIC newsletter.

1.1.4.4 MARKETING RESEARCH

Whereas environmental scanning focuses on the longer term, marketing research considers the more immediate situation. It is primarily concerned with the provision of information about markets and the reaction of these to various product, price, distribution and promotion decisions. As such it is a key part of the MIS because it makes a major contribution to marketing mix planning.

Perrault and McCarthy (2002: 218) mention that successful marketing strategies require information on potential target markets and their likely responses to market mixes as well as about competition and other marketing environment variables. Managers also need information for implementation and control. Without good information, managers are left to guess, and in today's fast – changing markets, this invites failure.

Perrault and McCarthy (2002:218) define a MIS as an organised way of continually collecting, accessing and analyzing information that marketing managers need to make decisions. Successful marketing strategies require information on potential target markets and their likely responses to marketing mixes as well as on competition and other marketing environment variables. Access to good marketing information could be of great help to the smallholder farming community.

Perrault and McCarthy (2002:218) explain the elements of the MIS as follows:

1.1.4.5 INFORMATION SOURCES

These could either be market research studies, internal data sources and external data sources which could be of great help to the smallholder farming community.

1.1.4.6 MARKETING MANAGERS AND THE DEVELOPMENT OF THE MIS

Information technology specialists must work in close collaboration with marketing managers to ensure that the right and useful information is stored in the MIS. In the livestock industry, it is organisations such as the Red Meat Abattoir Association (RMAA), the then SAMIC and the Directorate- Statistics that, in partnership with Information and Communication Technology specialists have the responsibility of developing such marketing information systems. The above-mentioned organisations are regarded as sources of livestock marketing information. Through their own established networks, commercial farmers have an advantage of accessing this information. The situation is different with farmers in Moretele as the networks are very poor. To date, government has tried to facilitate organisation of cooperatives among smallholder livestock farmers. Challenges confronted across this sector include lack of managerial capacity, especially financial management, inappropriate governance, petty politics, and all other constraints. There is a dire need to capacitate these cooperatives such that they function well.

1.1.4.7 DECISION SUPPORT SYSTEMS (DSS)

A MIS organises incoming information into a data warehouse-a place where databases of information are stored. To get better decisions, most marketing information systems are now provided with a decision support system (DSS). A DSS is a computer programme that puts managers on - line so they can study available data and make better

marketing decisions, faster. This is the case in the livestock industry where organisations such as SAMIC, RMAA collect, analyse and process raw data into information and make it available to the users on a weekly or monthly basis.

1.1.4.8 BETTER DECISION-MAKING THROUGH INFORMATION

Once marketing managers or farmers see how a functioning MIS operates, or how a DSS can help their decision-making, they become eager for more information. They realise that they can improve all aspects of planning, blending and combining the product, place, price and promotion elements into marketing mixes and developing and selecting plans. Further, they can monitor the implementation of current plans, comparing results against plans and making necessary changes more quickly.

1.2 THE PROBLEM STATEMENT

To summarise, smallholder livestock farmers in South Africa, including those residing in the area of Moretele in the North West Province do not have appropriate knowledge and access to marketing information to enable them to participate effectively in mainstream markets.

Their information needs can be summarised as:

- who and where the buyers of livestock are, how they can be contacted, what their conditions of business are, preferences for quality and variety
- access to immediate and current prices to help farmers decide whether to sell their cattle, or to determine if the price offered by a buyer is a reasonable one

- information about alternative marketing channels
- information on best methods to promote their livestock to the targeted markets.

1.3 THE RESEARCH OBJECTIVES OF THE STUDY

The objectives are broken down into a primary objective and a number of secondary objectives:

1.3.1 PRIMARY OBJECTIVE

This study intends to conduct an investigation into the marketing information needs of smallholder livestock farmers in the Moretele area in the Bojanala Platinum District Municipality of the North West Province.

1.3.2 SECONDARY OBJECTIVES

The secondary objectives that flow from the primary objective are:

- to determine the demographic profile of the smallholder livestock farmer and access to communication media
- to determine the quality of marketing information resources currently available to the smallholder farmer
- to determine the role of support institutions in facilitating marketing information for the smallholder livestock farmer
- to put forward recommendations that will enhance marketing information access by smallholder livestock farmers in Moretele

- to identify further areas of research on the plight of smallholder farmers in South Africa.

1.4 RESEARCH METHODOLOGY

At first secondary research was conducted. This was followed by the primary research.

1.4.1 SECONDARY RESEARCH

Published studies and an unpublished dissertation, dealing with marketing information, and the role of marketing information in facilitating access of livestock producers to mainstream markets, were used extensively as sources of information. This research also provided a backdrop to the primary objective, which is to highlight the marketing information needs of smallholder livestock farmers in Moretele. (See also the bibliography for a complete list of secondary sources consulted.)

1.4.2 PRIMARY RESEARCH

Primary information is collected specifically to address the research problem under investigation. In this study primary data were collected by using structured questionnaires to 1) determine the livestock buyers' requirements and 2) to determine the knowledge gap and marketing information needs of the smallholder livestock farmers, who are members of the National Emergent Red-meat Producers' Organisation (NERPO), in the Moretele area in the Bojanala Platinum District Municipality.

1.4.2.1 THE LIVESTOCK BUYERS REQUIREMENTS AND INPUTS FROM OTHER STAKEHOLDERS

The research process began with the determination of the market requirements of livestock buyers. This was done by developing a structured questionnaire covering market requirements that included grading, quality, quantity, food safety, price determination distribution channels and promotional issues. Key personnel of the buyers of livestock including the South African Feedlot Association (SAFA) and the South African Red Meat Abattoir Association (RMAA) were interviewed. DAFF has already established a very close working relationship with the organisations. These interviews were successfully conducted.

These organisations were consulted with the view of obtaining their market requirements and perceptions of constraints confronted by smallholder livestock farmers in participating meaningfully in mainstream markets.

Local market agents including South African Federation of Livestock Auctioneers and Meat Brokers (SAFLA-MB) and speculators who buy livestock from the farmers regularly were also interviewed to assess their market requirements and weaknesses identified during transactions.

Important stakeholders including the SAMIC, The Agricultural Research Council (ARC), DAFF's Directorates of Marketing, Food Safety and Quality Assurance, Animal Health and Production, Farmer Settlement, the National Agricultural Marketing Council (NAMC), NERPO and extension staff of the North West Province were interviewed with the objective of collecting information on experiences they have with the smallholder livestock farmers' marketing information needs. The total number of other stakeholders consulted was eight (8).

1.4.2.2 THE SMALLHOLDER LIVESTOCK FARMER KNOWLEDGE

After completion, the information collected was used in developing the research instrument to determine the knowledge of the smallholder livestock farmers regarding the marketing information requirements. The researcher already held discussions with NERPO, a non-profit farmer commodity organisation that was established in 1999. Its primary aim is to facilitate the commercialisation of the smallholder livestock sector by ensuring their meaningful participation in mainstream economic activities. NERPO agreed to make available to the researcher a register of its members located in Moretele in the Bojanala Platinum District of the North West Province. This membership register constituted the population of this study.

All the registered NERPO farmers fit the definition of smallholder livestock farmers as they sell their livestock on a commercial basis and have benefited in various government programmes. All available farmers were interviewed, implying that a census was conducted. The rest of the farmers in the area are not classified as commercial as they keep livestock only for food security and other reasons than for commercial purposes.

The research instrument was a questionnaire which was developed from information collected during the livestock buyer requirements determination phase, asking the farmers about their knowledge of marketing mix elements relating to product, pricing formation, existing livestock distribution channels and communication strategies.

The questionnaire also covered demographic aspects, including access to contemporary communication media, demographic profiles and relationships with other key stakeholders in the industry. The questionnaire was also translated into a local language which is

Setswana, for ease of understanding, where necessary. District livestock extension staff and the executive committee members of NERPO in Moretele assisted to facilitate completion of questionnaires by the farmers.

1.4.3 ADMISSIBILITY OF THE DATA

Only fully completed questionnaires completed by the following respondents was considered:

- Key buyers of livestock
- Smallholder livestock farmers located in the Moretele of the Bojanala Platinum District Municipality district of the North West Province registered with NERPO.

1.4.4 DATA ANALYSIS

Completed questionnaires were screened to ensure that all questions have been adequately answered. Where there was lack of clarity, a follow up was made as all respondents were required to provide their full contact details.

A total of 15 questions were developed for the livestock sector. The buyers who were interviewed during assessment of their requirements were prompted with open-ended questions to help develop the survey instrument for the smallholder farmers.

The data used from the surveys were used to establish whether the research objectives were achieved so that conclusions and recommendations can be drawn.

A comparison between marketing information requirements of the buyers of livestock, and the knowledge of livestock farmers on these information requirements was conducted in order to determine whether there are significant gaps. Particular attention was given to livestock class requirements, price, alternative marketing channels and promotional dimensions. The Statistical Package for Social Sciences was used for statistical analysis.

The statistical measure of association used in the study is the Goodman and Kruskal Tau value.

1.5 CHAPTER LAYOUT

Chapter 1: Background of the study

This chapter will cover the background to the study, the research problem and objectives and the research method that will be followed. The research proposal, with some amendments will serve as a basis for this chapter.

Chapter 2: A perspective of the South African agriculture market

The history of agricultural marketing in South Africa will be covered. The various Acts that were introduced and the impact on the livestock producer will be examined. Challenges and opportunities that confront the present livestock producer and the smallholder sector in particular will be highlighted.

Chapter 3: Marketing Information Systems

The nature, role and importance of marketing information systems will be examined. The relevance of marketing information systems in the present livestock marketing environment will be highlighted. Chapters 2

and 3 of this proposal will cover the secondary research dimension of the study.

Chapter 4: Research methodology

The approach to be followed and the type of primary data that will be collected will be outlined in this chapter. The data will be collected by means of structured questionnaires. A pilot study will be conducted with the buyers of livestock. Interviews will be held with buyers whose headquarters are based in Pretoria. These interviews will be complemented by telephonic conversations with the targeted participants. Other key participants in the industry will also be interviewed.

Farmers, who are members of NERPO, will then be interviewed, using a farmer questionnaire that was developed through inputs received during the piloting phase. The questionnaire will cover aspects of marketing information requirements, including grading and standards, logistics, prices determination and promotional issues. The questionnaire will also cover demographic elements and relationships with other key stakeholders. Local extension officers and NERPO office bearers will be asked to collect information from the farmers, using the survey instruments.

Chapter 5: Research findings

The findings of the empirical research will be presented. These findings will refer to the extent of lack of marketing information relating to market requirements.

Chapter 6: Conclusion and recommendations

In this chapter, the findings will be interpreted and conclusions will be drawn. It is envisaged that the kind of information needed by the smallholder livestock farmer located within Moretele will be available as a result of this study.

The next chapter will focus on the evolution of South African agriculture with particular emphasis on its impact on the emerging livestock farmer.

CHAPTER 2: A PERSPECTIVE OF THE SOUTH AFRICAN AGRICULTURAL MARKET

2.1 INTRODUCTION

In this chapter, the history of agricultural marketing in South Africa will be covered. The various Acts that were introduced and the impact on the livestock producer will be examined. Challenges and opportunities that confront the present livestock producer and the smallholder sector in particular, will be highlighted.

2.2 EVOLUTION OF SOUTH AFRICAN AGRICULTURE

Agriculture marketing history of South Africa must first be discussed before attention can be given to the agricultural marketing environment in which livestock producers operate.

The micro environmental variables are actors or forces close to the company that affect its ability to serve its customers. These forces are the organisation itself, market intermediaries, customers, suppliers, competitors and publics. A public is any group that has an actual or potential interest in or impact on an organisation's ability to achieve its objectives such as financial institutions, the media, government, citizens, local and other stakeholders, etc.

The macro environmental variables are larger societal forces that affect the operations of the organisation. These factors include demographic, economic, natural, technological, political and cultural forces.

Various acts governing the marketing of agricultural products including livestock were passed in South Africa in the last century. The evolution of agricultural and livestock marketing should be analysed within the context of these acts that were promulgated at different times. (See also chapter 3 which follows and which the agricultural environment is discussed in more detail.) The evolution of agricultural marketing in

South Africa can therefore be categorised in the following distinct periods:

- Pre-deregulation phase (period up to 1937 and period between 1937-1968)
- Deregulation phase (1996)
- Post-deregulation phase (1996 onwards)

Figure 2.1 illustrates the phases that constitute the evolution of South African agriculture

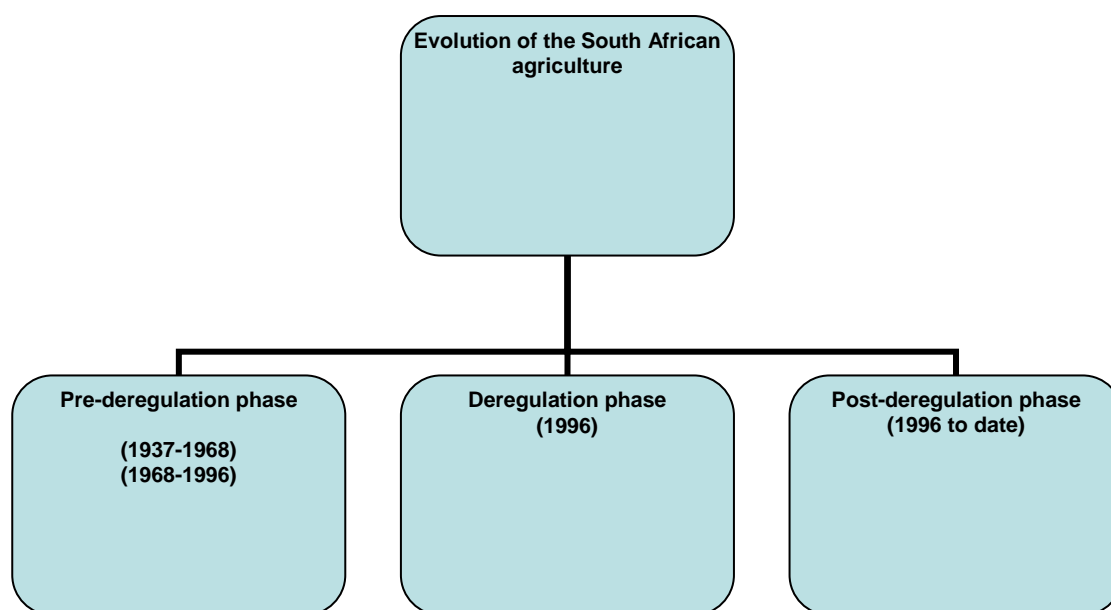


Figure 2.1: Evolution of South African agriculture. Source: Author.

2.2.1 PERIOD UP TO 1937

2.2.1.1 SOCIO-POLITICAL FORCES' INFLUENCE ON SOUTH AFRICAN AGRICULTURE

The agricultural sector in South Africa, as elsewhere in the world, was affected by indirect and direct state intervention. Indirect

intervention included social and political policies as well as fiscal, labour, monetary and foreign trade policies. Direct intervention included investment, commodity and marketing policies. The history of the Marketing Act of 1937 has to be therefore seen against this background of state intervention. This history is reflected in the changing ways in which these policy instruments have been used over the years to influence the marketing of agricultural products in South Africa. (Inquiry into the Marketing Act 1992: 5.)

South African agricultural policy was dominated by the way in which virtually all of these different policy instruments have interacted to create the two agricultures, commercial and subsistence farming, which exist today. Some of the key macro environmental forces that influenced agricultural marketing at the time were:

- Land policy

The major instruments of production policy were the Land Acts of 1913 and 1936. The Land Act of 1913 served as the major instrument of segregation of access to land in South Africa. The schedule to this Act defined about six per cent of the agricultural land of South Africa being set aside for blacks. This process was followed by the Development Trust and Land Act of 1936, which released a further seven to eight per cent of the farm land for the same purpose. At the same time a series of proclamations served to give legal sanction to policy makers' perceptions of traditional forms of land tenure in the homelands.

The formation of the Land and Agricultural Bank of South Africa marked the first new major state intervention in the

agricultural sector in the last century. The purpose of the Land Bank was to provide loan finance to farmers who did not have access to the commercial banking sector. This was supplemented by the later institution of the Agricultural Credit Board, which served the higher risk category of farmers. These financing institutions administered a range of sanctions on lending to black farmers. In later years a whole range of mostly parastatal institutions were created in the homelands to provide credit to these farmers. (Inquiry into the Marketing Act *op. cit.* 6.)

- Labour policy

Labour policy was pursued through a range of direct instruments, but was also affected by many other less direct policies. The range of influences included influx control measures, the Land Acts themselves, subsidies on farm worker housing, the Group Areas Act of 1950 and the Physical Planning Act of 1967. Decades after the passage of the Land Act of 1913 saw the large-scale conversion of peasant farmers into farm labourers, a process which was supplemented by the other policy instruments as outlined above. (Inquiry into the Marketing Act *op. cit.* 6.)

- Technology policy

The earliest examples of direct state intervention could be found in the form of technology policy prevalent at the time. Within the livestock sector, this generally took the form of the importation of animal breeding stock. Other and later forms of technology policy included the intervention through the development of large-scale capital intensive agricultural projects in the homelands, and also the development of a

sophisticated agricultural research capacity in the universities and the establishment of the ARC at that time. (Inquiry into the Marketing Act *op. cit.* 6.)

- The promulgation of the Marketing Act of 1937

The promulgation of the Marketing Act of 1937 had a direct effect on how livestock and other agricultural products were marketed in South Africa. This Act was the direct result of the deliberations of the Viljoen Committee, appointed in 1934. The Viljoen Committee argued that the inelastic demand for farm products, including livestock, the adverse climate in South Africa, the lack of information and the risks inherent to a free market justified state intervention. The committee argued for mechanisms to ensure stable prices and to allow for surplus removal. Statutory powers were required to levy the required funds to meet these objectives. The Committee felt that the agricultural problem had become too complicated to be handled by thousands of ill-organised and financially weak individuals with conflicting interests. With respect to pricing, the committee could not see why this could not be done equally well, if not better, by a small body of responsible men equipped for the task and in possession of all the statistical facts necessary to determine a fair price justified by the circumstances of the day. (Inquiry into the Marketing Act *op. cit.* 7.)

The 1937 Act was promulgated for two main reasons. First, it was believed that the Act would enable farmers to stand together, and thereby stabilise and increase the prices they received for their produce also on the export markets. Second, there was a belief that cooperation among farmers would cut out unnecessary duplication in the marketing and distribution chain,

and therefore lower the cost of getting produce to the consumer in the form, and at the time and place desired. Both these arguments were premised on the view that incomes in agriculture were lower than they should be because of a combination of natural factors and exploitation by middlemen and speculators. There is, however, little evidence that indicates these objectives were ever achieved.

This trend of large-scale state intervention in agriculture was, however, not unique to South Africa. The Great Depression and drought at the turn of the third decade of this century placed increased pressure on governments worldwide to intercede on behalf of farmers. What was unique to South Africa was the way in which this intervention combined with the Land Acts of 1913 and 1936 to favour the interests of white commercial farmers to the exclusion of others such as smallholder black farmers. (Inquiry into the Marketing Act *op. cit.* 8.)

2.2.1.2 EFFECT IN THE LIVESTOCK INDUSTRY

Until 1932, red meat marketing was not controlled. After the depression and draught of the early 1930's, the Board for the supervision of 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 where price control was substituted by minimum processing and auctioning of carcasses according to mass and grade.

The end result of the interventions and circumstances discussed above has been an agricultural sector which displayed, among others, the following characteristics:

- an inequitable agricultural structure, displaying many imbalances within and between commercial and subsistence farmers, both with respect to access to land and to support services. This resulted in a dispensation which was largely unsustainable in economic, financial, social and environmental terms
- export of surplus basic foods although at a financial loss due to subsidies offered
- development of a workable information system for the commercial farmer development of a wide range of export markets in respect of a few selected commodities
- development of quality seeds, plant material and breeding stock
- despite this apparent food self-sufficiency, the prevalence of widespread poverty, malnutrition and hunger located to a large extent in the rural areas
- a high level of input prices relative to product prices as a result of the import substitution policy and market concentration in the manufacturing sector
- an unsustainable impact on the budget in a time of high budget deficits

- a financial crisis among commercial farmers in many parts of the country
- an inflexible infrastructure and skewed geographical patterns of production.
- an output pricing policy in favour of producers: and
- extensive environmental degradation in many parts of the country, partly related to input and output pricing policies. (Inquiry into the Marketing Act *op. cit.* 9.)

2.2.2 PERIOD BETWEEN 1968 TO 1996

A review of the Marketing Act of 1968 would not be complete if other legislation or instruments giving power and authority to the Marketing Act were not also mentioned: (Inquiry into the Marketing Act *op. cit.* 10-14.)

- The Co-operatives Act, 1981. In terms of the old Co-operative Societies Act, 1939, a cooperative could get similar rights as a Board applying a single-channel marketing system. Although the new Act no longer provided for the imposition of such a system, several existed in terms of transitory provisions in the Act, notably for ostriches, tobacco and lucerne hay.
- The Livestock Improvement Act of 1977. In terms of this Act, a total ban was placed on the export of fertile ostriches or ostrich eggs.

- The Wine and Spirit Control Act of 1970. Aspects similar to those contained in the Marketing Act were embodied in this Act.
- The Sugar Act of 1978. Procedure for price fixing and division of proceeds between growers and millers represented were the main features of this Act.

The Marketing Act of 1937 was repromulgated in 1968 to be known as the Marketing Act of 1968. The marketing of livestock in South Africa was also affected by the promulgation of this Act. The Marketing Act of 1968's major objective was to provide the introduction of subordinate legislation called Schemes. Each Scheme pertained to a different product and instituted a Board to administer such a Scheme. Beside the normal administrative provisions relating to the objectives of the Board, the constitution thereof, the period of office of members, the calling of meetings and the acquisition of property, each Scheme gave specific powers to its Board that in one way or another influenced the marketing of the product to which it applied. The Scheme also provided for the imposition of compulsory levies and special levies to respectively cover administrative costs or be utilised as the Scheme provided. The powers of the Boards varied from Scheme to Scheme. These powers were derived from sections of the Act according to the needs of a particular industry, and in general entailed that a Board could apply such a power with Ministerial approval. In some cases Ministerial approval involved a further action by obliging the Minister to publish a Notice in the *Government Gazette* before the Board's decision took effect, while in other cases, Ministerial approval sufficed.

The Act applied to products listed in its Schedule. This list included basic commodities as well as value added products. Livestock were also part of this schedule. This, however, did not mean that there were Control Boards for each product, as the Act covered

more than the activities of Boards alone. From a marketing point of view, these other activities played a secondary role to the functions of the Boards and covered aspects such as funding of the South African Agricultural Union (SAAU), an umbrella body representing white commercial farmer organisations, control of the import and export of products and Ministerial control of some products not under the jurisdiction of Control Boards. The discussion will however, be confined to the manner in which Boards operated under the Marketing Act.

In practice the effect was that while the Act itself contained a myriad of provisions, relatively few of these were normally accommodated in a particular Scheme, and of those accommodated, not all were usually applied and in force at a given point in time. Once in force, they were binding on all producers and persons who dealt with the product in the course of trade. Through the years the situation developed such that the primary functions of most Control Boards centred on only a few of the provisions of the Act, which may be summarised as follows:

- Imposition and usage of levies and special levies based on sections of the Act
- authority to buy a product to which the particular Scheme related at such a price or on such a basis as the Minister approved (the so-called 'surplus removal Schemes' based on section 56 of the Act)
- Imposition of a ban on the sale of the product except through the Board or the persons appointed by it (the so called 'single-channel marketing schemes' or derivatives thereof, based on section 64 of the Act): and

- Fixing or influencing of prices (based on as section 60 of the Act). Schemes and amendments to Schemes were in terms of the Act, instituted on request of a body of producers or a cooperative society or, where a Scheme had previously been in existence, by a Control Board itself, the Marketing Council or the Minister of Agriculture.

The Marketing Council was an advisory and investigating body instituted by the Act to perform certain functions. Apart from its advisory and investigatory functions relating to Control Boards, the Act also required that every decision of a Control Board in respect of which the Minister's approval was required, be submitted to the Council which, together with its recommendation thereon, had to be submitted to the Minister.

Where a Board was unable to take a decision in the first instance on the grounds of members having an interest in the matter, the Act provided that a Reference Board could take such decision in the place of the Control Board, details of which were spelt out in sections 7A - 7C of the Marketing Act.

As mentioned above, the Act did not only apply to Control Boards, but covered a wider though less spectacular spectrum. Of these aspects the most important was the control of the importation and exportation of products in terms of which the Minister has the following powers:

- to ban the import or export of a product altogether
- to ban the import or export of a product except on authority of a permit issued by the Director-General of Agriculture on such conditions as may be determined

- to confer on the Director-General or a Control Board the sole right to import or export a product, and
- to prohibit the import or export of a product, except by a Control Board or a person authorised thereto by the Board, on conditions that the Board may determine.

Until the promulgation and operation of the Agricultural Product Standards Act, 1990, the Marketing Act also provided for matters relating to grades, classes, standards of composition and marking requirements of products while a ban could be placed on the sale of a product unless graded, marked and packed in a specified manner.

“Independent” states and homelands controlled the marketing of agricultural products at various levels. The following tables depict the statutory measures applicable to each “independent” state and homeland:

Former “independent” states	Statutory controls applicable in the marketing of agricultural products
Bophuthatswana	Statutory control on: maize, oilseeds, wheat, flour Floor prices on: sorghum Registration for: Egg producers Single channel for: cotton
Transkei	Single channel for: wool Registration for: bakers
Venda	No statutory controls
Ciskei	No statutory controls

Table 2.1: “Independent” states agricultural marketing arrangements. (Inquiry into the Marketing Act *op. cit.* 13.)

Former “self-governing” states or homelands	Statutory controls applicable in the marketing of agricultural products
Kwa Zulu	Statutory measures for: food processing
Lebowa	Statutory controls for: maize and wheat Registration and inspection: butchers, milk, eggs, poultry
Kangwane	Same as South Africa
Gazankulu	Same as South Africa
Qwaqwa	Same as South Africa
KwaNdebele	Same as South Africa

Table 2.2: Homeland marketing arrangements. (Inquiry into the Marketing Act *op. cit.* 14.)

In 1992, the former Department of Agriculture requested the Kassier committee, headed by Professor Kassier of Stellenbosch University, to assess whether the Marketing Act of 1968 was equipped to address the current and future agricultural marketing challenges, whether these should be retained in limited or amended form, or should be replaced by an alternative system.

The committee was requested to investigate the status of agricultural marketing and develop recommendations for implementation to address new agricultural marketing challenges. The recommendations were to be in line with the principles of the new political dispensation that included the principles of transparency, sustainability, dynamism and comparative advantage. The Kassier report served as a source of reference in the deregulation of agricultural marketing in South Africa.

Findings from this investigation revealed the following:

- the Marketing Act of 1968 has not been successful in achieving its objectives. In fact, there was emerging evidence which supported the view that maintenance of the *status quo* would inevitably lead to a general breakdown of any form of orderly marketing. The most visible signs of this were the growth of parallel and informal markets, as the supposed beneficiaries of the Act (farmers) attempted to

open up alternative channels for the sale of controlled products

- the goal of efficient production has not been achieved, as productivity indexes showed only a slight increase over the past three decades while the large scale insolvencies of the 1980s further supported this assertion
- another objective, namely to ensure fair and equal access to as many producers as possible was thwarted by discriminatory legislation as well as a bias in favour of large-scale full-time farming
- one of the more specific objectives ascribed to the Marketing Act was the reduction of the marketing margin between the farm gate price and the consumer price. This margin reflected the value added to the product as it provided time, place and form utility to consumers, but may also reflect substantial inefficiencies for a variety of reasons. There is generally little evidence to show that farmers in general benefited much, in the way of being able to capture a larger share of this margin
- the past half century has seen substantial changes in communications technology and in the provision of infrastructure. The provision of information and means to transport, store, process, package and distribute farm products had become substantially more efficient during that period. The most important economic effect of these changes lies in the ability to reduce transaction costs in the economy. This has made existing markets potentially more efficient, and enabled the creation of markets where these did not exist in the past. It can be argued that the Marketing

Act has been an obstacle to the utilisation of such potential efficiencies and to the creation of new markets. The most substantial effect of the Act has been through its disincentives to competition, thereby largely smothering the incentive to innovate

- implementation of the Marketing Act and a number of other similar instruments of farm policy has favoured large-scale farmers. There were however, legal and political changes which affected the balance of power between different categories of farmers, between the farm sector and input suppliers and the processing industry and consumers. There is little doubt that many of the provisions of the Marketing Act were in conflict with the new set of rights and duties, and that many will be in conflict with the new balance of political power.

Specific recommendations were made, based on the evaluation of the agricultural marketing system. Key recommendations made by the committee were the following:

- that statutory single-channel and price support marketing Schemes be abolished and Boards operate as private and voluntary organisations outside of the Marketing Act. Each Scheme was to negotiate sunset agreements, especially where the export marketing was concerned
- that in cases where Boards followed unitary pricing policies, these immediately be abolished in favour of a pricing system which better reflects comparative advantage, including locational advantage and quality differentials

- that the procedures for institution, amendment and repeal of Schemes be streamlined
- that a more representative and transparent Marketing Council, to be called the Agricultural Marketing Council (AMC), be established
- that the AMC be constituted with equal representation of members each for the following interest groups: farmers, consumers, commerce and industry and the state
- that the AMC have advisory powers only. The specific functions of the AMC would be to advise the Minister of Agriculture on agricultural marketing policy, all legislation pertaining to agricultural marketing regulations as they may exist, and related matters such as competition and tariff policies, in consultation with the relevant authorities
- that the Agricultural Reference Board be abolished and that the AMC should fulfil this function
- that the possibility of a small statutory levy on agricultural commodities be retained under section 84A of the Marketing Act. such funds should be used exclusively for research in the public interest
- that the funding of the SAAU and its affiliates by means of statutory levies be discontinued subject to sunset arrangements, but in any event with a maximum phasing out period of three years. That all matters not related to marketing also be deleted from the Act.

With reference to red meat marketing, it was recommended that the grading system should be simplified and reflect consumer rather than producer preferences. Inspection of graded meat was to remain the responsibility of the former Department of Agriculture. It was further recommended that hygiene regulations should be relaxed to only minimum standards and based on such aspects as handling of meat and basic sanitary conditions.

The classification of abattoirs was to be abolished and meat be allowed to move freely from one part of the country to another, irrespective of the abattoir from which it came. (Inquiry into the Marketing Act *op. cit.* 75-81.)

This report of the Committee of Inquiry into the Marketing Act was instrumental in supporting this process of deregulation. Between the release of the Kassier report in January 1993 and the promulgation of new legislation, ten of the existing Boards were abolished. (Vink and Kirsten 2000).

2.3 DEREGULATION OF SOUTH AFRICAN AGRICULTURE PHASE (1996 ONWARDS)

The principle of a managed transition leading to minimal intervention was carried over into the promulgation of Marketing of Agricultural Products Act, (MAPA) of 1996 despite strong representations to simply scrap the entire system after a suitable phasing out period. However, the new Act went further than the recommendations of the Kassier Committee in building safeguards to protect the interests of the previously disempowered. This was accomplished through the ingenious manner in which it defined the conditions under which intervention could take place, and the process for allowing this to happen.

The case for a free market system rests on the argument that farmers will be rewarded according to the contributions they make to the national economy, and that it is not possible to raise their incomes above these levels for any sustained period through interference with the forces of supply and demand. In addition, the market does not discriminate among participants and consequently provides the best mechanism for ensuring access for new entrants.

2.3.1 THE OBJECTIVES OF THE MAPA

The focus of the MAPA is on the provision for the establishment of a National Agricultural Marketing Council (NAMC), whose composition, powers and functions differ quite markedly from its predecessor, the National Marketing Council. (Marketing of Agricultural Products Act: No 47 of 1996).

The provisions in the Act give effect to an establishment of a more representative and transparent Marketing Council. A wide range of interests, including those of previously disadvantaged, consumers and farmers, are therefore represented on the Council, differing from its predecessor, which consisted of Ministerial appointees, in practice nominated by the SAAU, and officials of the Department of Agriculture.

Second, the Council has wider powers than its predecessor, whose main purpose was to advise the Minister, who in turn had little need to heed that advice. The following checks and balances have been built into the relationship between the Council and the Department of Agriculture under the new Act:

- staff members of the NAMC are explicitly under the control of the chairperson of the Council, as opposed to seconded staff as took place under the old Act

- the Minister approves the budget of the Council after consultation with the Minister of Finance, as opposed to the control that rested with the Director-General under the old Act
- where the Council makes recommendations regarding the implementation of a statutory measure, the Minister has to publish his or her reasons for accepting, rejecting or referring back those recommendations in the *Government Gazette*
- the process for establishing whether a statutory measure complies with the objectives of the Act serves as further protection against the kind of discriminatory practices that were characteristic of the Control Boards under the old Act. Under the former rules, the National Marketing Council, whose members were officials of the department, and whose staff was seconded by the department, advised the Minister, who made the final decisions with no compulsion to provide reasons for a decision. Under the new Act there are, by contrast, a number of stipulations that attempt to make the process of deciding on an intervention more transparent and inclusive, in the process allowing the NAMC access to a broader range of expertise.

These provisions include the following:

- the NAMC has to publish its intention to investigate the possibility of introducing a new intervention, or of continuing, repealing or amending an existing intervention, in the *Government Gazette* as well as the popular press. The purpose is to ensure that all directly affected groups are aware of the proposed change and are given the opportunity to lodge objections or representations
- directly affected groups are defined in the Act as any group of persons who are party to the production, sale, purchase,

processing or consumption of an agricultural product and include labour employed in the production or processing of such product

- the NAMC can, in terms of powers granted under section 7 of the Act, appoint a committee to investigate any changes to statutory interventions. However, such a committee has, as far as is possible, to represent the relevant directly affected groups
- in the event that the NAMC does not appoint a committee, it shall as far as possible give directly affected groups an opportunity to comment directly to the Council. The full spectrum of views put to the council also has to be presented to the Minister
- the NAMC is also empowered to enter into agreements with persons for the performance of specific duties
- finally, the NAMC is also empowered to undertake investigations, and advise the Minister, on a number of issues related to the marketing of agricultural products. These include the co-ordination of agricultural marketing policy in relation to national economic, social and development policies and international trends and developments, and the ways in which the objectives of the Act can be promoted. This wider brief allows the NAMC to place its recommendations into a wider perspective.

Thus, the way in which the objectives of the Marketing of Agricultural Product Standards Act are structured, the procedures required to give sanction to an intervention, and the manner in which representations by affected groups are dealt with, all serve to minimise the risk of decisions aimed at favouring the few and disempowering the majority.

As stated above, the old Marketing Act never clearly set out its objectives beyond the general goal for orderly marketing. To

accomplish this, the old Act set out a series of enabling measures that could be implemented under certain specified conditions. These conditions were kept vague, and there were few checks and balances built into the process. By contrast, the 1996 Act set out to prevent rather than to enable undesirable interventions. This it accomplished through the mechanism of the stated objectives, as well as the procedures required to implement any intervention.

The MAPA states its objectives explicitly in section 2, where it spells out the conditions under which any statutory measures are to be allowed. These include:

- increased market access for all market participants
 - the promotion of efficiency in the marketing of agricultural products
 - optimisation of export earnings from agricultural products
 - enhancing the viability of the agricultural sector.
- (Marketing of Agricultural Products Act *op.cit.*).

Statutory measures may only be introduced if the Minister is satisfied that such measures will directly and substantially advance one or more of the objectives without being substantially detrimental to one or more of such objectives. In addition, the Act states that no measure that is likely to be substantially detrimental to food security, the number of employment opportunities within the economy or to fair labour practices will be allowed.

2.3.2

DEREGULATION OF THE RED MEAT INDUSTRY

The Meat Scheme in existence at the time of the promulgation of the 1996 Marketing Act, was publicised in the *Government Gazette* of 7 February 1991. The following diagram depicts the functions of the Meat Scheme.

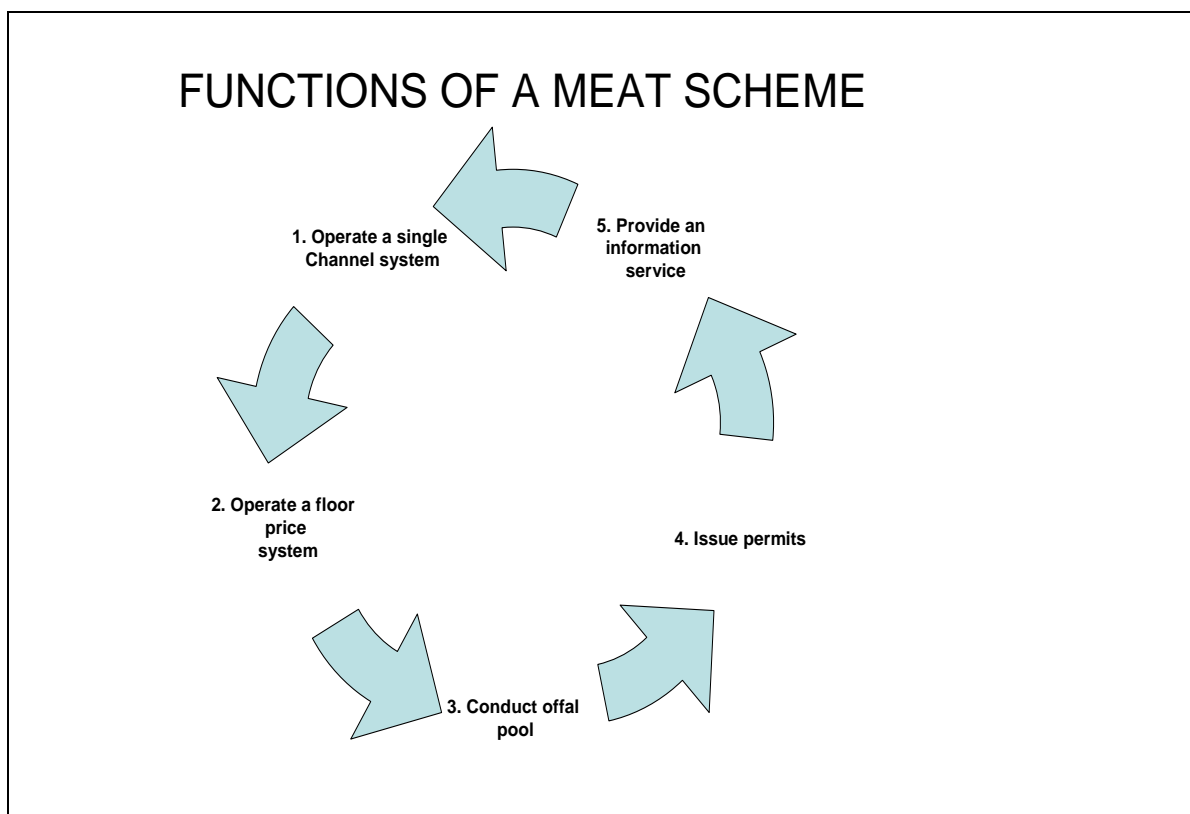


Figure 2.2: Functions of the meat scheme (Source: NAMC). 2003. Report on the investigation into the effect of deregulation on the red meat industry: 17.

The Meat Scheme *inter alia* made provision that the following functions be performed by the Board, namely to operate a single channel marketing system for slaughter animals, meat, offal and hides and skins.

In the early 1990s the Meat Scheme made provision for controlled and uncontrolled areas. In practice this meant that only live animals could enter the seven major controlled areas. After the animals have been

slaughtered at the large city abattoirs, a major portion of the supply of carcasses took place through the 11 public auctions at these abattoirs.

In 22 January 1993 the Minister for Agriculture approved that the Meat Scheme be amended to repeal the prohibition regulations imposed in terms of the Meat Scheme and the Marketing Act of 1968, with regard to slaughter animals, meat, offal and hides and skins. The repeal of these prohibitions led to the abolition of restrictions regarding the movement and method of sale of slaughter animals and red meat products.

With the abolition of the controlled areas, a shift occurred in livestock slaughter patterns from the consumer centres (city abattoirs) to the areas of production (the rural areas). This resulted in the erection of a large number of small and medium abattoirs in the production areas. This growth created a major oversupply in slaughter capacity, mainly in the big consumer centres or city abattoirs. The reduction in throughput at the city abattoirs led to the closure of a few big abattoirs, most notably the City Deep abattoir in Johannesburg in May 1998. The deregulation of control over the movement of livestock and meat in 1993 coincided with a rapid growth in the informal market. This was characterised by the slaughter of livestock outside registered or approved abattoirs, followed by own consumption or direct selling to consumers. Quality control problems inevitably occurred, which could have had detrimental effects on consumer perceptions of red meat. Since the 1950s the Meat Board has operated a system of floor prices for cattle, sheep, and goat and pig carcasses. This system was repealed in 1993. (Investigation into the red meat industry *op. cit.* 18.)

The Meat Board conducted offal pools in terms of the Meat Scheme. However, this stipulation was removed from the Scheme on 5 November 1993. The Meat Board performed the meat classification and inspection services at 42 abattoirs. The meat classification and

inspection of meat were regarded as important functions in order to ensure a healthy product for consumers. These functions were assigned to the former DoA years later.

The Meat scheme provided a market information service to the industry. This service included the provision of price information to the industry.

The Meat scheme was also involved in the promotion of red meat among the consumers.

The deregulation process of the South African red meat industry gained momentum in the early 1990s, and was finalised with the dissolution of the Meat Board in December 1997. Statutory measures that were granted to the Meat Board, for example, the registration of certain roleplayers in the red meat industry, the furnishing of records and returns and the collection of statutory levies by the Board, came to an end in 1996.

On 22 March 2000 the NAMC appointed a Committee, in terms of section 7 of the MAPA, to investigate the impact of deregulation on the red meat industry, paying particular attention to the smallholder red meat producer and to propose action steps to be taken in order to address possible marketing problems. (Investigation into the red meat industry *op. cit.* 11.)

The Committee focused on the smallholder red meat sector during the investigation process. From the investigation, it appeared that the deregulation process did benefit the smallholder red meat producers, as the market became open for everybody, although the smallholder producer still found it difficult to compete with the commercial producers in terms of quality and volumes. The smallholder producers also did not have the supporting systems in place to compete with the commercial producers. The Committee made a number of recommendations that,

once implemented, could improve the situation of the smallholder red meat producers.

The Committee was supposed to address red meat industry issues in a deregulated environment with a view to making recommendations that will increase efficiencies, market access and industry competitiveness, particularly for smallholder producers and traders in the sector.

The following diagram illustrates the effect of deregulation to the smallholder livestock farmer in the order of importance from bottom up:

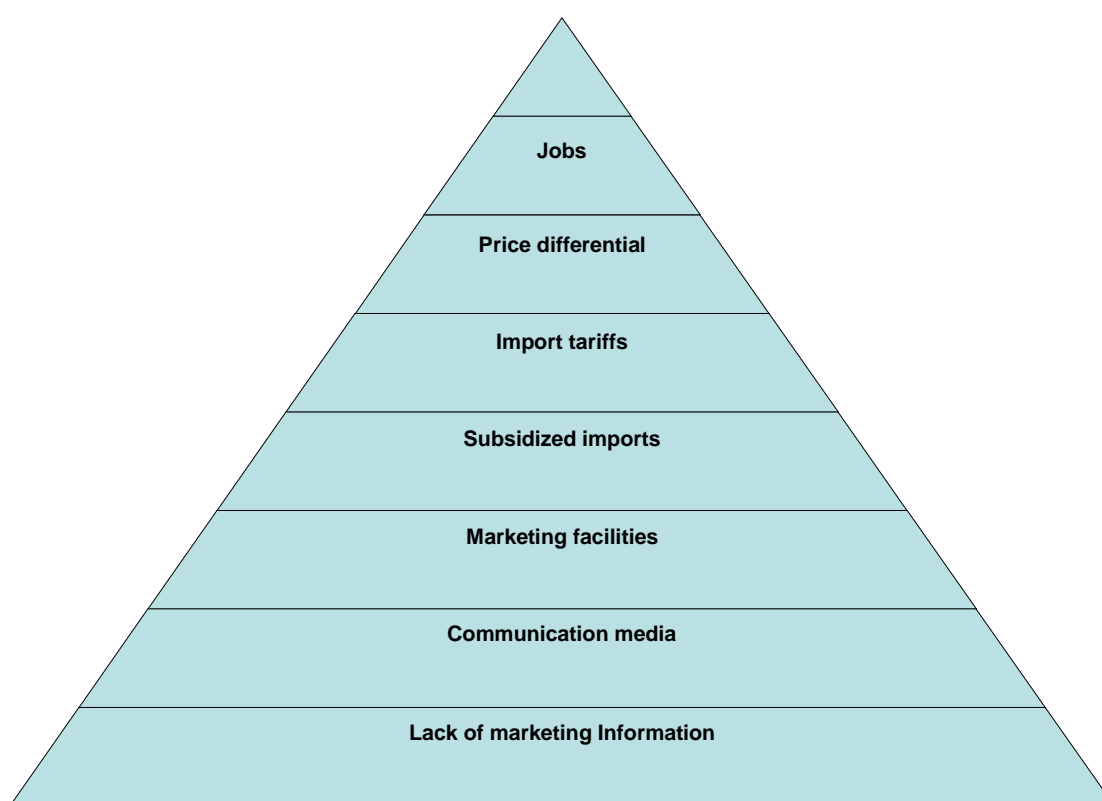


Figure 2.3: Effects of deregulation to the smallholder livestock producer (Source: Investigation into the red meat industry *op. cit.* 26– 68.)

2.3.2.1 LACK OF MARKETING INFORMATION AND ITS EFFECT ON THE SMALLHOLDER LIVESTOCK PRODUCER

Deregulation and the new focus on the smallholder class of farming enterprises and agribusinesses have greatly increased the need for

quality agricultural information. This is one of the key effects of deregulation. In the subsequent chapters of this dissertation, attention will be focused on the type and frequency of the information needed by smallholder farmers to be in a position to participate in mainstream agricultural marketing activities.

Currently, the demand far exceeds the supply and accessibility of reliable and timely agricultural statistics needed for production, marketing and trade, and effective policy making. Marketing information can be particularly valuable where countries, like South Africa, changed from a state-controlled marketing system to a system of private enterprise, in that farmers and traders can be made aware of market opportunities. (Investigation into the red meat industry *op. cit.* 40.)

The rapid growth in the number of registered abattoirs and accompanied vertical integration of animal sourcing to direct selling of the value added product to customers changed the red meat trade from a predominantly auction market to a private selling or buying on the spot and forward market. This eroded the red meat industry's price information base and impacted negatively on producers as it became difficult to assess representative indicator prices. What exacerbated the problem for smallholder livestock farmers is the fact that they do not even know or understand these prices.

A National Agricultural Information Workshop was held in March 2000. This was organised jointly by the former Department of Agriculture (DoA) now called the Department of Agriculture, Forestry and Fisheries (DAFF), Chair of International Agricultural Marketing and Development (CIAMD) and the NAMC. Its major goal was to develop a system to meet the needs of all users of information in the agricultural sector, especially the needs of the smallholder farmer sector. Some of the recommendations made at the workshop could be summarised as follows:

- establish a formal body to coordinate development of an information system that is mutually beneficial to all roleplayers in South Africa's agricultural sector
- review and recommend statutory measures required to support the information system
- recommend ways to ensure appropriate training of extension officers and others involved in data collection, processing and dissemination, and
- investigate infrastructure needs for improved generation and dissemination of agricultural information for the smallholder livestock producer.

Again, the former Minister of Agriculture launched the Agricultural Marketing Information System (AMIS) in February 2007. The intention of the AMIS is to ensure that the much-needed information reaches all farmers through the Internet and through the use of cellphone technology.

The red meat industry needs ready access to up-to-date strategic marketing information, including auction prices, contract and average retail cut prices, import volumes, slaughter figures, herd sizes, abattoir volumes, etc. Price formation in the smallholder red meat industry is currently of major concern.

In the past, the Meat Board used to supply most of this data, mostly extrapolated from abattoir slaughter figures supplied to calculate levies that were collected by the Board. The collection of statutory levies in the red meat industry stopped with the closure of the Meat Board in December 1997. The reason to supply such data has thus fallen away

and other means have to be devised. At present, almost all the Provincial Departments of Agriculture (PDAs) are involved in supplying market information, but it is generally felt that the systems in place, as well as the budgetary allowances are by no means adequate to meet the need. The red meat industry applied for the reintroduction of a levy in the industry. The general purpose of the collection of the levy was to enable the industry to disseminate marketing related information, conduct research and development to maintain the industry's competitiveness in the global economy and to also empower new farmers to participate effectively in the industry. Collection of the levy was approved by the Minister in October 2007.

The challenge of access to marketing information by the smallholder sector is mainly on the availability of relevant and dependable data, and the tools used to disseminate the information.

Slaughter numbers are not fully representative and this proliferates errors down the line. Attention must therefore be given to obtaining correct statistics and include slaughter numbers from the smallholder sector. Market information reaches only livestock farmers who have access to the Internet, to a large extent, this is also the situation with abattoir and feedlot information.

The committee recommended that extension officers should be utilised to a greater extent to gather and disseminate information in the smallholder sector. The committee further recommended that market information needs of the smallholder sector should be ascertained. Provision of relevant information could alleviate many of the problems experienced by the smallholder sector. Information such as the market demand, how to farm, how many cattle to keep per hectare, how to market their products, where to market, etc. is required.

The committee recommended that proper utilisation of existing extension officers should also be to the benefit of the smallholder red meat producer. Currently approximately 3 500 extension officers are employed by the various provinces, but they are not being utilised to their full potential in the sense that they are doing administrative duties in offices instead of delivering a valuable service to the rural communities. The Committee was of the opinion that although there are enough extension officers, they are, in many cases, not properly trained to render an effective service to the smallholder livestock producers. To alleviate the problem the red meat industry consulted with the ARC which was willing to help retrain extension officers. The industry was in favour that extension officers be trained to the appropriate level for the maximum benefit of the smallholder livestock producers.

Both smallholder livestock farmers and extension officers needed training on several marketing related aspects, such as the interpretation and use of marketing information, budgeting for marketing costs, small-scale processing opportunities and techniques for value adding. To communicate this information to the smallholder sector, well-trained extension officers needed to be appointed. Trained extension officers could address most of the above-mentioned problems.

It was also felt that as long as the Government provided extension services, it might not have the required impact. Such services could be privatised. Labour unions should, however, be consulted in the process of the privatisation of these services.

To alleviate the problems of a shortage of government veterinarians, as well as inexperienced extension officers, the Committee proposed that graduated veterinary students should do a one year compulsory community service (similar to medical students). About 90 veterinary students graduate annually from the Onderstepoort Veterinary College. The Committee was of the opinion that such an arrangement should be

the most appropriate measure to provide animal health and extension services to the rural areas. By implementing this arrangement the Committee felt that there would be a vast improvement in extension services, in maintaining livestock numbers in the much needed areas within a short period.

2.3.2.2 COMMUNICATION MEDIA

Communicating with the smallholder sector especially in rural areas, is difficult owing to the absence of effective communication media, relatively low degree of literacy, and various languages used by the smallholder livestock sector. There is a need to establish prime communication needs and the correct media to reach the farmers. At this stage of small-scale farming development, information should be adapted to the communication facilities available to smallholder farmers.

The committee recommended that there is a need to undertake an investigation to ascertain the information needs and optimum communication media and channels to be used for the benefit of the smallholder red meat producer. To date, the use of cellphone technology has proved to be a very useful tool in the dissemination of market-related information, for most industries in agriculture. (Investigation into the red meat industry *op. cit.* 32.)

2.3.3 OTHER EFFECTS OF THE DEREGULATION OF LIVESTOCK ON THE SMALLHOLDER LIVESTOCK PRODUCER

2.3.3.1 MARKETING FACILITIES

The Committee discussed the effect of deregulation on the smallholder red meat producer since 1994. The opinion was that the deregulation process did not have a major effect on the communal producers,

because in both periods, before and after deregulation the smallholder producers were not actually part of the formal marketing system of red meat in South Africa. The deregulation process did however, benefit the smallholder red meat producers, as the market is now open for everybody. The smallholder producer, however, still found it difficult to compete with the commercial producers when it comes to quality and volumes. The smallholder producers also do not have the supporting systems in place to compete with the commercial producers. The Committee was therefore of the opinion that more emphasis should be placed on the training and empowerment of smallholder red meat producers, *inter alia*, through the provision of adequate extension services and the establishment of an appropriate infrastructure to assist a more commercially orientated approach towards livestock farming. (Investigation into the red meat industry *op. cit.* 30.)

It was already mentioned that South Africa has a national cattle herd of approximately 13.6 million of which approximately 4, 8 million cattle (35.3 per cent of the national herd) is owned by the smallholder sector. The commercialisation of the smallholder sector is one of the biggest challenges facing the red meat industry. There is a great need to educate and train livestock owners in the smallholder sector to transform from animal keepers to commercial farmers. The smallholder sector often keeps cattle as a status symbol but do not use it for income generation purposes. The average annual off-take rate of cattle in South Africa is approximately 17.6 per cent. In the commercial sector the off-take is estimated at 25 per cent, while it is only approximately 5 per cent in the smallholder sector. Developed countries off-take rates are close to 30 per cent. A fully commercialised off-take rate would yield in excess of R2 billion to the smallholder producers. The emergent sector therefore has huge potential.

The commercialisation potential of the smallholder producers in the red meat industry is therefore much greater than in other sectors of

agriculture. If attempts succeeded to increase the off-take rate of the smallholder sector, South Africa could easily change its position from a net importer to a net exporter of red meat. (Investigation into the red meat industry *op. cit.* 31.)

Elements of the Broad-Based Black Economic Empowerment relating to capacity and training can come in handy where smallholder farmers are trained by buyers and commercial farmers and the latter gaining points in the empowerment scorecards.

The Committee was informed that the smallholder farming system is currently experiencing various problems which include insufficient fencing, insufficient resting of grazing lands, uncontrolled movement of animals from one area to another, lack of law and order in communal communities and unavailability of infrastructure. These problems also differ from one province to another. The Committee regarded political intervention as the best option to alleviate the position of the communal producers. It was recommended that the different affected roleplayers should consider the regulation of the smallholder farming system. It should be done in consultation with the representatives of the traditional leaders of the communal areas.

NERPOs viewpoint was that the sustainability of the current communal subsistence sector was counter-productive and resulted in the wasting of limited human and financial resources. Focus should be given to the farmers that have access to land and have benefitted in government programmes.

Provision of road infrastructure is essential for agricultural and rural development. In the case of rural areas, provision of road infrastructure can only be considered to be a government function. The most pressing needs have to be identified and this needs to be taken up at high level among the government departments concerned.

The majority of smallholder livestock producers lives in rural areas and do not have the equipment to transport their animals to auction venues. Providing market facilities in rural areas could limit the need for transport of livestock.

Provision of rural infrastructure such as boundary fences, water resources for animal use, dipping tanks, auction sale pens, loading/offloading ramps, etc. will provide an enabling environment for producers, especially for the communal producers. It was recommended that the state assist in providing appropriate infrastructure and other relevant market facilities in the rural areas.

The Committee was of the opinion that a more regulated environment is needed to address some of the problems experienced by the smallholder producers in the red meat industry. In other words, government has to provide some “injections” to help the smallholder producers. The Committee felt that cultural differences, a lack of law enforcement and “internal political agendas” could be major obstacles to address some of the problems. The Committee furthermore agreed that consultation with traditional leaders was of paramount importance when it came to addressing the problems of smallholder producers in the communal areas.

There is currently much emphasis on land reform, especially after what happened in Zimbabwe. Land is a limited natural resource and is the only basis for agricultural production.

The former Minister for Agriculture and Land Affairs stated that farmland in South Africa has been redistributed at a very slow pace since the start of Government’s land reform programme. This slow pace of land reform was due to factors such as time needed to get the new programme off the ground, legislation that had to be written and limited access to finance. Government’s objective is to increase access to

farmland by black South Africans and transfer ownership of 30 per cent of the country's farmland over the next 15 to 20 years.

On land reform, the Committee was of the opinion that a balanced approach, which obtains speedy and visible results, be followed to prevent a similar situation to that which had occurred in Zimbabwe. It was recommended that the approach to the issue of land reform in an orderly manner. State should provide facilities to enable the smallholder red meat producer to obtain access to finance in order to buy land and the necessary equipment.

2.3.3.2 THE IMPACT OF SUBSIDISED IMPORTS ON THE LOCAL RED MEAT INDUSTRY AND RED MEAT PRICES

Agriculture remains the most highly subsidised sector in the world economy. With the introduction of the General Agreement on Tariffs and Trade in 1992, the domestic red meat industry was for the first time directly exposed to the European Union (EU) s agricultural subsidies. In the last few years, EU beef imports to South Africa constituted 77 per cent of the approximately 16 000 tons total beef imports from outside the South African Customs Union (SACU). The EU and Hungary also supply 94 per cent of the pork imports of approximately 10 000 tons, which constitutes mainly pork ribs imported at a zero tariff.

South Africa is classified by the EU as a country with an insignificant beef industry which carries the highest beef export refunds. Previous attempts to have South Africa reclassified by the EU to zones with significant beef industries and therefore smaller refunds have been unsuccessful.

One of the major aims of the Uruguay Round of international trade negotiations was to bring about further liberalisation and expansion of world trade to the benefit of all especially developing countries through the reduction of tariffs and non-tariff barriers. Therefore, the Uruguay

Round committed World Trade Organization (WTO) members to fundamentally reform trade policies and eliminate distortions in world agricultural trade. However, the Organisation for Economic Cooperation and Development (OECD) recently confirmed that support to farmers in the developed countries, has returned to the high levels of subsidies. The OECD is a 29 member strong group that includes a tier of relatively wealthy nations. Livestock producers in the OECD therefore continue to benefit from relatively high levels of support. Producers of beef and mutton/lamb are more supported than those for pork. The OECD expresses all forms of support through a comprehensive indicator of support, called the producer support estimate (PSE). The average PSEs for meat in the EU ranged from 10 to 20 per cent for pork, approximately 60 per cent for beef and approximately 54 per cent for mutton.

In the past beef imports came mainly from the EU, where subsidies are paid to their producers. In such cases import tariffs could easily be justified. Indications, however, are that an increased quantity of unsubsidised beef is imported from countries outside the EU. In the case of mutton, it is mainly imported from Australia and New Zealand. It is common knowledge that these countries do not subsidise agricultural products. This resulted that questions could be raised on the competitive position of the local red meat industry.

It must also be understood that South Africa is currently not self-sufficient in the production of red meat, especially mutton. The annual slaughtering of lamb and sheep decreased from approximately 8.2 million in 1990 to approximately 4.8 million in 1999, a decrease of 41 per cent. The slaughtering of both cattle and pigs over the same period decreased by approximately 14 per cent. These figures are significant, especially due to technological improvements where there is a surplus in the world of almost every agricultural commodity.

It was recommended by the Committee that the South African red meat industry must be protected against disruptive trade practices, including subsidised imports and producer support systems. More important, there is a huge need to source livestock from the smallholder sector to close this gap. (Investigation into the red meat industry *op. cit.* 37.)

2.3.3.3 THE IMPACT OF THE RED MEAT IMPORT TARIFF LEVEL ON THE LOCAL RED MEAT INDUSTRY AND THE SMALLHOLDER LIVESTOCK PRODUCER

South African agricultural markets were extensively deregulated over the past decade, and farmers currently face competition in both the domestic and foreign markets. The primary purpose of tariffication on imported red meat is to protect the local industry against distorting trade practices. The Committee realised that the Government has a responsibility to reduce inflation, create favourable conditions for employment and to provide food at the lowest possible price to consumers. Unfortunately, red meat is imported from countries, mostly developed, where subsidies are paid to their producers. Exporters in developed countries also receive export refunds that further create an unlevel playing field. In South Africa, red meat producers do not receive any subsidies.

Although the playing fields are not level, the Committee agreed that tariffs should not, have as their aim, the isolation of any industry from international competition.

The application of tariffs is a WTO sanctioned measure, not unique to South Africa and applied virtually wherever red meat is traded. The South African Department of Trade and Industry (the Dti) should determine the actual tariffs in accordance with internationally agreed WTO tariff lines and in consultation with the former Department of Agriculture (DoA) NAMC and industry other stakeholders.

The current import tariffs for red meat were introduced in 1995. After the Association of Meat Importers and Exporters applied for a revision of the import tariff, the Dti commenced with a full investigation into the tariff dispensation for red meat, edible offal and preparations of red meat. Some roleplayers in the meat industry provided industry information to assist the Dti with their investigation.

The proposed new tariff dispensation for red meat has not yet been implemented. The Committee was strongly of the opinion that measures should be implemented to expedite the process of tariff reviews. Currently, four different governmental institutions, namely the DAFF, the Dti, NAMC and the Department of Finance have to give their inputs/blessing before an amended tariff structure can be published in the Government Gazette. The Committee was of the opinion that such an arrangement should expedite the process of tariff reviews.

It came to the attention of the Committee of the possible importation of live animals from Australia for slaughtering purposes. The Meat Industry Forum, the policy making body in the red meat industry, recommended that a fixed tariff be applied to imported live animals for slaughtering purposes. The Forum however requested that the tariff not be made applicable on the importation of live animals for slaughtering purposes from Southern African Development Community (SADC) countries or animals imported for breeding purposes.

It was pointed out that Australian mutton might be regarded as a byproduct of their wool industry. Old sheep have little market value in Australia, because there is no local demand for it. There is also no first world country demand for this type of animal. The opinion is that importation of these animals would have a detrimental effect on the South African sheep industry in general and on smallholder farmers in particular. The Committee also became aware of a number of letters that were compiled by SADC countries, where they also complained

against the importation of sheep for slaughtering purposes. It should be noted that slaughtered animals from Australia and New Zealand compete directly with the smallholder livestock sector on the grade of animals imported to South Africa.

It was recommended that the Dti investigate the possibility that a fixed tariff be applied to imported live animals for slaughtering purposes. Further, it was also recommended that when livestock is imported for slaughtering purposes (excluding the import of live animals from SADC countries), all quarantine procedures applicable to the import of breeding stock, also apply to slaughter stock.

Unscrupulous importers abuse the current system by way of under invoicing in order to pay a lower import tariff. This benefit is in many cases, not passed on to consumers. Imported meat is normally priced in such a manner that it fetches a price marginally lower than local red meat, for the maximum benefit of the importer. In such a scenario both the importer and the consumer benefit but to the detriment of the producers.

It was recommended that a concerted effort by all roleplayers to stop tariff fraud would be to the benefit of both the government and the primary red meat industry. The estimated loss in tariff income on the importation of red meat amounts to more than R50 million per year. Some members of the Committee were of the opinion that the data of Customs and Excise and the South African Reserve Bank should be linked in order to avoid under invoicing (in some circles it was indicated that a data linkage had already been established between Customs and Excise and the South African Reserve Bank.) The additional income received by the government through such an arrangement could, for example, be used to appoint/train extension officers in the red meat industry for the benefit of smallholder livestock producers.

The committee recommended that the period of tariff reviews be shortened to six months or less. The committee further recommended that the import inspection system at ports of entry be outsourced to a competent assignee (as allowed under the Meat Safety Act 40 of 2000). import tariffs were to be administered in a proper and competent manner. (Investigation into the red meat industry *op. cit.* 29.).

The Committee was of the opinion that the absence of genetic promotion was one of the major deficiencies in the current red meat marketing chain. Especially after the outbreak of Foot and Mouth Disease (FMD), sustained genetic promotion could do much to improve the demand for red meat. The industry has in the past few years dedicated itself in the promotion of red meat amongst the consumers. To a large extent these promotions have helped increase demand for red meat amongst consumers.

2.3.3.4 THE PRICE DIFFERENTIAL BETWEEN THE PRODUCER AND THE CONSUMER

The following tables illustrate the widening of the gap between producer and consumer prices in the past decade:

Annual producer and consumer prices (c/kg)					Basis year = 1990	
	Nominal Producer price (c/kg)	Real Producer prices (c/kg)	Slaughtering	Nominal Consumer prices (c/kg)	Real Consumer prices (c/kg)	Producer share in consumer prices (%)
1993	521.9	362.2	2,393,263	1255.6	871.3	41.57
1994	728.3	463.9	1,918,045	1556.0	991.1	46.81
1995	746.8	437.7	1,771,569	1742.0	1021.1	42.87
1996	785.5	428.8	1,763,671	1784.0	973.8	44.03
1997	820.8	412.7	1,567,635	1899.0	954.8	43.22
1998	792.5	372.8	1,750,000	1895.0	891.3	41.82
1999	812.0	368.4	1,907,785	1966.1	880.6	41.30

Table 2.3: Annual Producer and Consumer Prices (Beef) (Source: Investigation into the red meat industry op. cit: 43.)

The constant decline in real producer prices for beef (from 428.8c/kg in 1996 to 368.4 c/kg in 1999) is evident from the above table. It is quite clear that the cattle producer was in a much weaker position in the year 1999 more than 4 years ago.

Annual producer and consumer prices (c/kg)					Basis year = 1990		
	Nominal Producer price (c/kg)	Real Producer prices (c/kg)	Slaughtering	Nominal Consumer prices (c/kg)	Real Consumer prices (c/kg)	Producer share in consumer prices (%)	CPI
1991	639.4	554.6	8,785,614	1217.0	1055.5	52.54	115.3
1992	687.8	523.8	8,026,820	1452.0	1105.9	47.37	131.3
1993	774.2	537.3	7,147,386	1596.0	1107.6	48.51	144.1
1994	1,048.0	667.5	5,014,825	2041.0	1300.0	51.35	157.0
1995	1,047.3	613.9	4,550,208	2259.0	1324.2	46.36	170.6
1996	1,112.5	607.3	4,834,360	2320.0	1266.4	47.95	183.2
1997	1,253.4	630.2	4,064,573	2519.0	1266.5	49.76	198.9
1998	1,216.4	572.2	4,475,000	2503.0	1177.3	48.60	212.6
1999	1,236.4	550.4	4,872,077	2568.0	1132.1	48.15	225.3

Table 2.4: Annual producer and Consumer Prices 1991-1999 (Mutton) (Source: Investigation into the red meat industry op. cit: 43.)

Real producer prices for mutton remained on more or less the same level as the base year. The producer share of the consumer prices

decreased from 52.5 per cent to 48.1 per cent. It is also interesting to note that slaughtering of sheep decreased with more than 44 per cent since 1991 until 1999.

Annual producer and consumer prices (c/kg)					Basis year 1990		
	Nominal Producer price (c/kg)	Real Producer prices (c/kg)	Slaughterings	Nominal consumer prices (c/kg)	Real consumer prices (c/kg)	Producer share in consumer prices(c/kg)	Commercial sow herd
1991	415.8	360.6	2 031 306	791.6	686.6	52.53	123.109
1992	467.0	355.7	2 049 401	979.0	724.6	47.70	124.206
1993	455.4	316.0	2 020 027	1044.3	724.7	43.61	122 426
1994	617.7	393.4	1 815 452	1238.0	788.5	49.89	110 027
1995	531.0	311.3	1 922 583	1333.0	781.4	39.83	116 520
1996	621.5	339.3	2 034 575	1345.0	734.2	46.21	119 681
1997	789.6	397.0	1 846 517	1559.0	783.8	50.65	108 619
1998	724.9	341.0	1 870 000	1598.0	751.6	45.36	110 000
1999	705.8	288.5	1 851 993	1524.0	710.2	46.31	1000 000

Table 2.5: Annual Consumer and Producer Prices 1990-1999 (Pork) (Source: Investigation into the red meat industry op. cit: 44.)

Since 1991 until 1999, the real producer price for pork decreased from R3.60/kg to R2.89/kg while the producers' share in consumer prices of pork shrunk from 52.5% to 46.3%. The real consumer prices however increased over the same period from R6.87/kg to R7.10/kg.

Agriculture became exposed to international trade in the early 1990's. In theory, tariff free imports stabilise the market for consumers of agricultural products, who benefit from goods bought at the lowest prices available on international markets. This situation is aggravated by the greater support that South Africa's competitors get from their governments. The real decline in producer prices is believed to be the main contributing factor to low returns on capital invested in farming. This would also explain in part the 25 per cent loss in job opportunities in agriculture since 1988.

The Committee noticed that South African real red meat prices of the primary producer had declined significantly during the past decade, probably to be more in line with the lowest international prices. The gap between producer and consumer prices however widened which partially could be contributed to value adding done after animals had been sold by the producer.

2.3.3.5 THE IMPACT OF DEREGULATION ON JOB OPPORTUNITIES IN THE RED MEAT INDUSTRY

Agriculture directly contributes less than 4% to the country's GDP, while the sector employs approximately 13% of the economically active population.

In 1999 the former Department of Agriculture undertook a case study based on a mail survey to some commercial farmers to obtain up-to-date information regarding the employment situation in agriculture. The questions asked in the mail survey were also designed to identify trends in various categories of employment within agriculture from 1994/95 through to 1998/99.

The results of the case study showed that the number of farm workers among both regular workers and employment of family workers on commercial farms experienced a downward trend in 1998/99 compared to 1994/95.

The total number of regular workers in employment had fallen by 7.6% over the period from 1994/95 until 1998/99. With the exception of horticulture (up by 1.2%), employment of regular workers fell in every other major type of farming operation covered by the case study. For example, among commercial farmers whose main source of income was field crops, employment of regular workers declined by 6.1%. Among those whose main source of income was either mixed farming

or animal production, the decline was even steeper-11.9% and 14.4% respectively.

The employment of family workers on commercial farms declined with 5.3% between 1994/95 and 1998/99. The greatest decline over the period was among those commercial farmers whose main source of income was animal production (down 27.6%). Among commercial farmers whose main source of income was field crops, the number of family members employed fell by 5.3%. The decline in employment of family members by farmers whose principal source of income was mixed farming was minimal (down 1.1%). Notably, horticultural farmers increased the number of family members they employed by 9.5% over the period 1994/95 to 1998/99.

Employment of seasonal workers rose over the period 1994/95 to 1998/99 by 3.4%. Over the period, the percentage decline in employment of seasonal workers (down 9.3%) was highest among farmers whose main source of gross income from farming operations was animal production. By contrast, while over the same time period seasonal workers in mixed farming operations was also down 4.2%, horticultural farmers increased the employment of seasonal workers by 17.3%. Farmers who derived the most income from the sale of field crops also increased their employment of seasonal workers (up 6.3%) over an equivalent period.

In terms of contract workers, commercial farmers included in the DoA case study reported that, they accounted for an increasing proportion of the agricultural labour force, rising from 18.8% in 1994/95 to 24.2% in 1998/99.

The former DoAs case study showed an upward trend in employment of skilled workers by commercial farmers. In 1994/95, 60% of workers employed by commercial farmers were skilled, rising to 65% by

1998/99. This upward trend is reflected in the commensurate decline in the proportion of unskilled workers over the same period, from 40% in 1994/95 to 35% in 1998/99.

In summary, the impact of deregulation on job opportunities in the agricultural sector in general and in the animal sector in particular, is as follows (1998/99 compared with 1994/95):

Type of Workers	Total %	Animal	Field Crops	Horticulture
Regular workers	-7.6	-14.4	-6.1	+1.2
Family workers	-5.3	-27.6	-5.3	+9.5
Seasonal workers	+3.4	-9.3	+6.3	+17.3
Contract workers	+28.7			

Table 2.6: Job Opportunities in the agricultural sector (Source: Investigation into the red meat industry op. cit: 47.)

From the above, it is evident that commercial farmers involved in animal production shed the largest number of employment. There could be a number of reasons for this, which could include the following:

- labour legislation against the background of a free market economy and a globalised world in which the producer must compete
- low prices for red meat products (real producer prices for cattle and pigs are respectively 15.5 and 20.1 per cent lower than ten years ago while that of sheep remains more or less the same)
- the number of slaughtering of cattle, sheep and pigs are the lowest in 100 years
- output prices increase at a slower rate than input costs. The so-called “cost-price squeeze” phenomenon.

The Committee took note of the Skills Development Act that was implemented in 2000. According to this Act, employers are obliged to contribute 0.5 per cent of their remuneration cost to a Skills Development Fund. The Committee acknowledged the fact that better trained employees would eventually result in less job opportunities (because the more people are trained, the more they can do). The Committee was furthermore of the opinion that the lowering or elimination of import tariffs on red meat would result in lower local prices for red meat and eventually also in less job opportunities. The Committee was not against the training of employees or the lowering of import tariffs, but could not overemphasise the importance of an enabling environment for economic growth to counter the effects of better skilled employees and lower import duties.

South Africa's real GDP growth over the past decade has averaged 1 per cent per annum where our main competitors are growing at rates of between 3 and 8 per cent. Agriculture's contribution to the GDP decreased from 4.3 to 3.2 per cent over the same period (in 1960 agriculture contributed 11.1 per cent to the GDP). The Committee was of the opinion that an increase in employment in the agricultural sector would only be obtained if the position of the agricultural producer improved.

Recent statistics, however, indicate however that livestock earnings amount to about 10% of agricultural export and through plays a significant role in stabilizing the economies of the SADC countries.

During the period 1994/95 until 1998/99, commercial farmers involved in animal production shed the largest number of employment compared to the field crop and horticultural industries. The agricultural sector needs economic growth for job and wealth creation. A prerequisite for growth in the red meat industry is market growth in the form of an increased per capita consumption of red meat (per capita consumption

of beef, sheep meat and pork in South Africa and SADC is significantly lower than in major producing countries), and niche market development focusing on the distinctive competencies of the South African red meat industry (through the assistance of Dti's supply side measures).

The livestock industry remains a major employer in the economy with some 424 000 people employed as 2 125 000 dependent on the livestock industry for their livelihood. (Livestock Development Strategy for South Africa 2006 - 2010 - Investing in the potential of the livestock sector resource base for lasting animal agriculture.)

2.3.4 SUPPORT SERVICES PROVIDED BY GOVERNMENTAL INSTITUTIONS

The Committee found it difficult to highlight the impact of deregulation brought about through legislation the past decade without taking into account the deterioration of support services provided by the former DoA and Provincial Departments of Agriculture over the same period. A deterioration in support services affect all role-players in the industry, whether commercial or smallholder. By neglecting their responsibilities, governmental institutions weaken the position of producers especially in a time that producers are exposed to international competition. On the other hand governmental institutions also strive to improve the conditions of especially the smallholder producers. The two issues have a cancellation effect on each other.

In October 1999 the former DoA held an Agricultural Workshop with the aim of establishing an annual forum for dialogue between government, farmers and labour, to deliberate on those issues that are critical for the sustainable development of agriculture. There was general agreement at the workshop that in order to achieve economic growth and development, various challenges such as improving the

competitiveness of industries in this sector, implementation of farmer settlement, enhancement of trade promotion and ensuring the creation of jobs in the agricultural sector, needed to be addressed.

The allocation of state funds in general is also diminishing at such a rate that research institutions are under financial pressure. The ARC also experienced budgetary constraints, which are due to cuts in the parliamentary grant. The ARC therefore is forced to seek external revenue. In the 1999/2000 financial year, approximately 32 per cent of its total income was generated from external sources, compared to approximately 22 per cent for the 1996/97 financial year. The parliamentary grant decreased from R337 million in 1997/98 to R274 million in 1999/2000, a decrease of approximately 19 per cent in two years.

In contrast, the New Zealand Government's investment in research, science and technology continues to increase each year for the past decade. Since 1994, their budget has set a pattern of looking three years ahead. The increases announced for the three-year period from 1997/98 to 1999/2000 represent an increase of nearly 20 per cent for research, science and technology. New Zealand is known as the country with traditionally the lowest agricultural subsidies in the world. Their PSE (producer subsidy equivalent) is 0,9%, that of South Africa 4,2%, Australia 6,8%, United States of America (USA) 21,6% and EU 45,3%.

The Committee was of the opinion that the state had the responsibility to provide the necessary infrastructure for research. This included financial assistance to support research and development institutions to prevent the deterioration of existing structures and services.

The Committee recommended that government should financially support research and development institutions to prevent the deterioration of existing structures and services. It was also recommended that government in consultation with the industry should identify relevant projects.

It was also recommended that the genetic diversity of the livestock industry should be regarded as a national asset and should be maintained by government. The committee further recommended that government should accept responsibility to maintain the animal health status of the national herd (this includes financial support to Onderstepoort Biological Products, the only institution that can produce vaccines for the so-called “African diseases”). More attention should be given in addressing the smallholder livestock producer. (Investigation into the red meat industry *op. cit*: 50.)

The red meat industry regards Value Added Tax (VAT) on red meat as unfair. Meat should be regarded as a staple food and thus exempt from VAT. By doing this, red meat would be made cheaper for the consumer. The result would be that the per capita consumption of red meat could increase and eventually the industry could grow to create the necessary job opportunities.

The gross retail value of the red meat industry in South Africa is estimated at approximately R15 billion per annum. Complete recovery of VAT at 14% therefore should yield R2.1 billion per annum. It is estimated that only approximately 70 per cent of this amount is recovered currently.

The very basis of VAT evasion is the industry's cause for low margins. The red meat industry (and all its facets from primary producer via livestock dealers, auctioneers, agents, abattoirs, wholesalers, processors and retailers up to the final consumer) is big business. A

14% advantage over one's competitor is therefore a significant addition to normal profit, especially if it is not declared for tax.

Slaughtering in the informal sector of the red meat industry could amount to an additional 20 to 30% of the official recorded slaughter figures. Total slaughtering of cattle, sheep and pigs for 1999 was estimated at 2.4 million, 6.2 million and 2.4 million head respectively. Gross tax evasion in the informal sector undermines the ability of the formal meat trade to compete with the informal sector.

The committee recommended that the South African Revenue Services (SARS) improve the collection of VAT on red meat products by monitoring slaughter figures at abattoirs and the implementation of structures for VAT collection in the smallholder sector. (Investigation into the red meat industry *op. cit.* 51.)

The government's policy for agriculture is that growth must increasingly be based on the ability to export and compete on the world market. Currently there is an overproduction of meat in the developed world. South Africa is traditionally a net importer of red meat. It may seem a contradiction in terms for South Africa, being a net importer of red meat, to consider exports. Due to a well-developed feedlot industry, South Africa however has a surplus of high quality cuts and a shortage of lower quality cuts for manufacturing purposes. The Committee was of the opinion that South Africa could easily turn into a net exporter of red meat, especially if the smallholder sector could be commercialised.

South Africa's export market development effort targeted niche markets through the joint efforts of a few industry role-players and SAMIC concentrating on the superior and consistent quality of South African red meat. It is proposed that products are sold under a genetic brand name that complies with agreed specifications to distinguish it from those of competitors as an exceptionally high quality product. Training

of distributors to promote and sell South African red meat forms an integral part in developing the export market.

South Africa has a shortage of export abattoirs that meet the requirements of developed countries. The procedures to qualify as an export abattoir are time consuming and a lengthy process. For example, to become eligible to export red meat to the USA, South Africa's meat inspection system must be equivalent to the USA system of inspection. The determination of equivalence by the Food Safety Inspection Service (FSIS) of the US requires that DAFF responds to the FSIS questionnaires for evaluation. DAFF therefore has the responsibility to conclude an equivalency protocol with the USA. It was indicated to the Committee that the DAFF had achieved satisfactory progress and was confident that the process would be expedited to a conclusion.

The opinion of the Committee is that the USA would provide an attractive market for South African red meat. If South Africa could obtain approval to export red meat to the US, it would also be easier to enter other developed countries. The Committee acknowledged the fact that adequate animal health, sanitary and phyto-sanitary (SPS) measures should be maintained to ensure SPS compliance and access to foreign markets. The committee recommended that DAFF ensures and proves that the South African meat inspection system is equivalent to that of the USA and other potential international markets.

The committee further recommended that SAMIC takes the initiative in the formation of a red meat export council (Joint Action Group), to assist the red meat industry in promoting exports through the export enhancement programmes of the Dti. The smallholder livestock producer is, of course, an important stakeholder in the development of these programmes

The committee recommended that the appointment of independent third parties (assignees) be implemented at export abattoirs performing meat hygiene standards as allowed under the Meat Safety Act. It further recommended that animal disease control fences be erected and maintained where required to meet international standards.

Stock theft is one of the biggest problems of both smallholder and commercial livestock producer in South Africa. According to figures released by the Stock Theft Unit of the South African Police Services (SAPS), 72 695 cattle was stolen in 1999, compared to 24 986 in 1990, an increase of approximately 191% over the relevant period. Regarding sheep, an increase of approximately 72% (139 288 in 1999 compared to 80 802 in 1990) was experienced over the same period. The Stock Theft Unit also found that the number of cases reported decreased on an annual basis but the number of stock stolen per incident, increased due to the involvement of syndicates.

In some African countries, like Tanzania, stock theft is regarded as “economic sabotage” and persons found guilty of stock theft receive a stiff penalty. It seems that sentences for stock theft in South Africa is not standardised and that the culprits are not deterred by the existing law enforcement and criminal justice system.

In order to further combat theft, the then Minister of Transport was requested to persuade the provincial departments of agriculture to give additional support to the fight against stock theft. The opinion was that the Department of Transport and the provincial departments could play a more important role in combating stock theft as stolen stock are usually transported by road. Studies indicated that approximately 70 per cent of stolen animals found its way to urban areas via butchereries and street hawkers.

The Committee was informed about the SAPSs intention to over time, close down specialised units, including all stock theft units. The SAPS felt that general policing would be improved by such a step. The Committee was of the opinion that the closing down of the stock theft units would be to the detriment of the entire industry in the fight against stock theft. This will also negatively impact on the competitiveness of the South African red meat industry. The Animal Identification Act eventually introduced the concept of a national identification mark and made provision for the tattooing of cattle under the age of 18 months. This enabled producers and the feedlot industry to market unblemished hides, and to retain the advantages of positive animal identification and traceability.

The Committee further recommended that measures be put in place to combat stock theft more effectively. They further recommended that the red meat industry be kept informed in the process of the closing down of the stock theft units.

The rules of origin and traceability are becoming critical factors in international trade negotiations. A typical trace on an animal could reveal where and when an animal was born, who owned it at any time, what the animal was fed, etc. (Investigation into the red meat industry *op. cit.* 53.)

The new Integrated Registration and Generic Information System (INTERGIS) envisaged for South Africa could be used to control animal movement and could also be used as an efficient tool to combat stock theft. There is also a growing concern among consumers about the origin, the safety and wholesomeness of meat. Product traceability gives retailers/consumers added confidence and guarantees about the above-mentioned.

The Committee recommended that the development of a traceability system for export certification be implemented. An investigation should be conducted into the possibility of the integration of INTERGIS and the Animal Identification Act into a National Traceability System. The auditing of a National Traceability System should be done by a competent independent third party. The smallholder livestock producer who has been marginalised needs to be included in these training processes.

One of the negative effects of deregulation was the deterioration of meat hygiene standards. As mentioned previously, the abolition of the controlled areas in 1990, led to a shift in livestock slaughter patterns from the consumer centers to the areas of production. This resulted in a huge increase in the erection of small and medium abattoirs in the production areas. Some of the “informal” abattoirs compete on an unequal footing with registered abattoirs where stringent health and hygiene requirements have to be met. Currently, there is little or no monitoring of the smaller abattoirs that are allowed to operate within the market but according to their own rules. This set the scene for destructive competition to prevail. A lack of funds to monitor the application of meat hygiene standards resulted in the partial disintegration of health standards. The Cape Metropolitan Council launched a project to clean up informal butcher trade in order to prevent the increase of health risks. An increase in tapeworm infestation prompted the Council to step in and improve the conditions under which animals are slaughtered by informal butchers selling meat in townships around the city. On many street corners, informal butchers sell meat on blood-spattered tables without realising the dangers this pose to their customers. Much of the meat comes from slaughtered animals that were never inspected.

The National Federation of Meat Traders mentioned in their submission to the Committee that it would appear that neither the former DoA nor the provincial departments of agriculture have the ability to implement effective control over the health aspects of the red meat industry. Their biggest concern is that the health and quality standards applied in the industry are questionable. The Federation felt that if the relevant authorities were not capable of the enforcement of legislation and regulations, then consideration should be given to the delegation of these responsibilities to an accredited third party.

The Meat Safety Act supports the above viewpoint. The Act stipulates inter alia that meat inspectors must be independent, that all meat slaughtered for human or animal consumption, have to be inspected and only those abattoirs that meet the minimum health standards, will be allowed to classify their meat. In order to prevent that the enforcement of meat safety standards becomes too expensive, while ensuring that standards are maintained, it was legislated that a minimum standard will apply.

According to the National Federation of Meat Traders the Government already acknowledged that it does not have the finance, or manpower to effectively police the implementation of the Meat Safety Act.

The Directorate Animal Health is responsible for the classification and marking of carcasses as well as marking (labelling) of red meat in the retail trade. A product derived from red meat does not fall in the scope of this Directorate's responsibility. In 1992 the grading system (as was monitored by the Meat Board) was changed to a system in terms of which carcasses were classified according to age and fatness. Classification is voluntary in the sense that abattoirs may decide if they wish to classify carcasses or not. However, if an abattoir decides to

classify it has to apply for an identification code and all carcasses leaving the abattoir have to be classified and roller marked.

Originally, the Meat Board was appointed by the then DoA as assignee responsible for the verification/auditing of the correctness of classification at abattoirs. With the demise of the Meat Board, SAMIC was appointed as assignee with the same function and responsibilities. Currently, approximately 95% of all commercial slaughter is classified. All these issues are matters of great importance to the smallholder livestock farmer who intends to participate in mainstream livestock marketing activities.

The recommendation from the committee was that meat inspection and classification services be done independently. There is a need to expedite the process of establishing a national food control agency to coordinate food safety matters on a national basis. Smallholder livestock producers should not be excluded in these processes as there was a need to build their capacity such that they participate effectively in these marketing activities. (Investigation into the red meat industry *op. cit.* 58.)

The Committee was informed that the Directorate of Veterinary Services for a number of years has attempted to fill vacant state veterinarian posts at uncompetitive salaries. The result is that the vacant posts were not filled and that the stock inspector, who plays a vital extension role, also is virtually nonexistent. To date, approximately 60% of all state veterinary posts were vacant. Apart from the large number of vacancies for veterinarians in the Eastern Cape and Northern Cape Provinces, there was a shortage of funds for medicine, vehicles, fuel and even licenses. Scalp is a major problem in the Eastern Cape, especially amongst smallholder farmers, but it seems

that there are just not enough state veterinarians and other resources to curb the problem.

The solution would be that the Directorate of Veterinary Services appoints sufficient and efficient state veterinarians and stock inspectors to attend to animal health. An alternative would be to utilise private veterinarians on a contract basis (or accredited by the former DoA) to deliver services on behalf of state veterinarian services but on a commercial basis.

The Committee was strongly of the opinion that aspects regarding animal health that could affect the national herd (which is a national asset) and veterinary extension services should be approached on a national level and not on a provincial level. The Committee was of the opinion that there was a lot of confusion in this regard with the consequence that national and provincial structures were not coordinated. (Investigation into the red meat industry *op. cit.* 58.)

The outbreak of the Food and Mouth disease (FMD) in Kwazulu-Natal again stressed the important role that government plays in disease control. The Committee stressed that FMD was a controlled disease and as such the Government's responsibility to combat. As a result of this outbreak it is necessary that certain policy aspects should be ironed out, for example:

- harbour and border controls
- compensation for producers if livestock has to be destroyed: and
- erection and maintenance of border and veterinary fences.

A national FMD working group, representative of the former DoA and industry was established by the Minister in order to have a coordinated approach to combat FMD. The Committee was of the opinion that a permanent working committee on animal health and livestock matters should be established to obtain an effective method of liaison between the DoA and the industry with a view to addressing animal health and other issues of substance on a sustained basis in the future.

The Committee recommended that the DoA facilitate the filling of vacant posts (regarding animal health technicians) and ensure that those personnel will have the necessary equipment and transport to do their work.

In conclusion, the Committee was of the opinion that a deregulated red meat industry mainly faces two challenges. On the one hand is the upliftment and commercialisation of the smallholder red meat sector and on the other hand is the need for the then former DoA and the provincial departments of agriculture to improve support services to the red meat industry.

The Committee furthermore agreed that a balanced approach should be found between cheap food for the consumer, maintenance and creation of job opportunities and the development and empowerment of the smallholder red meat producers. To ensure sustained agricultural production and compete against subsidised meat in a global environment is an uphill battle for the smallholder red meat producer.

It was made clear to the Committee that the meat industry had no objection to the importation of red meat as long as the local industry could compete on an equal footing with its competitors. Imports from Europe, for example, are heavily subsidised, and therefore it is necessary that the tariff be correctly applied to imports from those countries. The red meat industry accepted that any revised tariff

imposed, should be compatible with WTO regulations. The meat industry also did not have a problem with the current level of tariffs on red meat, but found the application thereof unacceptable for example, under invoicing of imports, law enforcement, etc. To combat irregularities with regard to the import of red meat, the meat industry proposed a fixed tariff system, calculated by means of a formula, to replace the current tariff system.

The deregulation measures implemented in the red meat industry opened the playing field for the smallholder red meat sector, but the playing field is not yet level. There might therefore be strong arguments for targeted resource transfers from government to resource poor farmers, designed to make them more productive and competitive. Such transfers would most appropriately take the form of research and development, information flows, training, and infrastructure, so that it may become possible for farmers to be integrated into the deregulated market and be empowered to respond appropriately to market incentives. These interventions by government might be required to “kick start” the rebirth of the smallholder red meat producer. (Investigation into the red meat industry *op. cit.* 59.)

2.4 POST – DEREGULATION: REVIEW OF THE AGRICULTURAL MARKETING ENVIRONMENT (1996 TO DATE)

In September 2005, the Minister of Agriculture and Land Affairs appointed a review committee to review the agricultural marketing efforts. The review committee was made up of members from the tertiary fraternity, the NAMC, the former DoA and the agricultural industry.

In September 2006, the Review Committee submitted a comprehensive report on responses of different industries to the deregulation of

agricultural marketing. (Report of the Committee to review the agricultural marketing environment September: 2006.) The Committee requested the various agricultural industries, input and service suppliers, government agencies, the industry trusts and the public at large to submit information in the form of responses to the following issues:

The Table below provides a synthesis of the opinions of the livestock industry on the impacts of deregulation of agriculture on production, and on the structure of the agricultural sector.

Issue item	Impact on output	Structural Impact
Red meat industry review on impact of deregulation	Growth in volume of beef and sheep meat output, decline in pork, decline in exports	Imports of beef and sheep meat declined, shift to informal market, lack of market information a problem, industry requires better plans to deal with disease outbreaks, border controls are a problem, implementation of food safety standards, traceability requirements lagging
Red meat review on process of deregulation	Too little attention paid to the critically important information function. Strategic information required for planning, market intelligence, and the normal flow of information from research. There is a concern with the scaling down of the funding of agricultural research by the state, especially the ARC.	The red meat industry and supporting institutions (ARC, the DTI, etc) argued that the pace of deregulation was too fast, and that a more measured process would have been more successful. The general conclusion is therefore that the state and the industries themselves did too little to prepare for deregulation, and there was not sufficient planning of safety nets for those adversely affected by deregulation.

Issue item	Impact on output	Structural Impact
Regulation on empowerment in the livestock industry	<p>There is evidence on progress with empowerment that was provided by the livestock industry. It is well to remember, though, that deregulation of the industry was accompanied by the withdrawal of many of the farmer support services that new entrants to agriculture require. Government still needs to channel support services for smallholder farmers, or to forge public private partnerships to further this end.</p>	<p>It is doubtful whether deregulation of markets had much of an influence, while the removal of direct support and trade liberalisation had a strong, mostly negative impact on transformation</p> <p>A lot of the action is in supporting industries rather than farming itself (e.g. bananas, cotton, dried fruit, maize and wheat milling where 40% of the market is controlled by Black Economic Empowerment (BEE) companies),</p> <p>Deregulation increased marketing risk, including livestock where single channel discouraged new entrants, including black farmers.</p> <p>Industry bodies in the livestock industry are freer to contribute to BEE than the Boards</p> <p>Deregulation had an overall positive impact on the agricultural sector. The main areas where little progress was achieved are in the advancement of black agribusiness enterprises, research, market information, and in changing the composition and direction of trade. Hence, it is generally recommended that specific support measures be introduced for black enterprises, and incentives be developed for closer cooperation with the private sector in information, promotion, research, consumer protection, and transformation. No direct support measures recommended the contemporary challenges.</p>

Table 2.7: Report of the Committee to review the agricultural marketing environment September 2006: 2-10.

2.4.1 RECOMMENDATIONS OF THE REVIEW TASK TEAM IN THE LIVESTOCK INDUSTRY

The task team review came up with the following recommendations for the livestock and other industries within the agricultural sector. The recommendations cut across all industries, but remain relevant in each and every industry, including livestock. (Agricultural Marketing review report 2006. *op. cit.* 11 - 18).

2.4.1.1 INFORMATION AND MARKET INTELLIGENCE

The public information system has become disparate, uncoordinated and largely privatized. DoA should task the NAMC to develop a coherent public information system together with industry and research institutions, having regard to the following:

- a public information system must be further utilised to build a market intelligence programme that is supported by the state and executed by the private sector
- closer working relations must be developed with our embassies in target countries to regularly feed intelligence home
- a public information system must also encompass domestic markets.

2.4.1.2 THE ROLE OF GOVERNMENT

The state, and especially the DoA should:

- recognise that capacity problems exist at all levels of government and cannot be remedied quickly, hence greater reliance on

markets is necessary, with effective state sanction and supervision

- resist attempts to reintroduce market regulations/control unless absolutely necessary
- develop more effective incentive programmes to direct industry efforts towards public priorities (e.g. land reform, BEE, research, information, etc)
- promote cost-sharing arrangements with industry. The existence of statutory levies, trust funds, voluntary levies and private funding for research proves that the private sector is committed to generate own funds for its priorities. Many of these priorities concur with those of government (for example, research, information, transformation, generic promotion, export promotion, etc). Cost sharing on joint priority areas would improve impact and foster much needed collegiality
- maintain closer and collegiate relations with industry without reverting to intervention. Government is expected to provide leadership whilst relying more on the private sector for implementation
- provide a clearer mandate and support to its key marketing instrument i.e. NAMC. The ambiguity and duality of marketing functions between the DoA and the NAMC causes unnecessary confusion. If the state has a dedicated Marketing Act and a special agency for agricultural marketing (NAMC) it is imperative that this agency be given an expanded mandate and resources to operate more effectively in this domain as seen any many other countries. In this regard, it is recommended that marketing functions be delegated to the NAMC. These functions include

international trade promotion, agricultural tariff and trade matters, economic and market research and contributions towards the skilling of agricultural economists in this domain

- show greater commitment to upgrading and establishing the requisite physical infrastructure required to make markets function more efficiently and equitably
- execute policy, leadership and strategies through closer alignment with other spheres and areas of government. The various spheres and demarcations of government have led to greater complexity and undue bureaucratisation of effort, despite the envisaged merits for delivery. Insufficient collaboration exists with important bodies like the Dti, the Competition Commission, the Department of Foreign Affairs and government departments who serve as institutional markets for agricultural produce
- provide greater economic leadership in SADC and proactively handle deliberations on regional trade towards the development of the regional economic state.

2.4.1.3 MARKETING LEGISLATION

The DoA should:

- conduct legislative reviews and redrafting of all laws and bodies related to agricultural marketing
- redraft the Marketing Act following this report. Whilst the Act remains relevant, in principle it requires further amendments to become more effective

- a technical committee should address the deficiencies in the Marketing Act that include the following areas:
- market intelligence
- the powers of the NAMC
- transformation targets
- the definition of statutory measures
- maintaining a public information system
- export promotion
- trade and tariff measures
- domestic markets
- developing regional trade
- market and economic research
- respective powers of the NAMC and the DoA
- roles of industry trusts
- roles and responsibilities of private sector
- consumer protection
- the application of levies.

2.4.1.4 INDUSTRY TRUSTS

The former DoA and the NAMC should ensure that:

- trust funds remain public goods and reserved for public priorities in industries
- industry trusts are aligned to national priorities as outlined in a revised Marketing Act
- industry trusts make a greater commitment towards transformation and black economic empowerment. This will include providing them with assistance to make the necessary adaptations to their statutes
- government nominees to the trusts are regularly and better informed of national priorities and expectations so that they can play their roles more effectively
- closer working relation between the trusts and the NAMC are fostered
- closer and more regular monitoring of the application of trust funds is introduced to prevent misallocation and undue depletion of funds
- industry trusts remain independent but are closely aligned with industry structures.

2. 4.1.5 THE ROLE OF THE NAMC

Whilst several industries have questioned the effectiveness of the NAMC in recent years, all agreed that the NAMC should be retained but

improved. The recommendations below provide further content in this regard:

- the promulgation of statutory levies by the NAMC should remain and continue, as it generates valuable industry contributions. However, a voluntary basis and sufficient consensus must be ensured to keep these measures effective and sustainable
- the NAMC functions cannot be limited to investigation and advising on statutory measures which had become its dominant function. The state and industries should commit to positioning the NAMC as its main agency for agricultural marketing. It can solicit state and industry funding for priority programmes such as market access for black farmers, export promotion, levies, application of trust funds, research and market intelligence
- the NAMC is well positioned as an important liaison between industry and the state and *vice versa*, and should assist industries in preparing and advancing their agricultural marketing interests with government agencies
- the NAMC should assist the private sector with developing and maintaining an effective information and market intelligence system that will increasingly assist in proactive strategic positioning in global markets
- the NAMC should develop a credible programme of economic and market research
- the former DoA may retain a statistics service, while the NAMC develop a comprehensive programme for agricultural economics and market research. The research should be aimed at tracking

economic trends and render valuable market intelligence that will enhance competitiveness and future positioning in markets

- the NAMC may at the request of industries introduce statutory and other measures to be promulgated under the Marketing Act that will promote market access for black firms and new entrants
- the NAMC should operate a concerted export promotion programme in close collaboration with industries, firms and the state. This pertains to domestic markets, established exports markets as well as new targeted growth markets in the global arena
- the NAMC should in collaboration with industries develop a collective generic promotion programme for South African products in existing and new international markets
- the NAMC should introduce cost sharing arrangements with industries for selected programmes. Levies and trust funds could be valuable sources of matching funds in this regard
- the NAMC should monitor advice and report on the role and execution of industry trusts
- the NAMC should coordinate international trade deliberations and strategic positioning in global markets
- the NAMC should develop a regional trade administration and promotion programme that will provide economic leadership and facilitate agricultural trade and development in the region. All these above-mentioned recommendations apply to the livestock industry and go a long way to address the plight if the

smallholder livestock producer in a deregulated marketing environment

Unfortunately, to date, this report was never publicly debated, instead another committee was appointed whose recommendations have not yet been published.

2.4.1.6 INTERNATIONAL TRADE

It was recommended that:

- International trade be afforded sufficient provision in a redrafted Marketing Act
- the NAMC should subsequently play a key role in international trade deliberations by providing the requisite technical support capacity to the DoA in this regard. The former DoA, supported by the NAMC, should pay stronger attention to changing the composition and direction of South Africa's agricultural export trade. This must be supported by a more aggressive export promotion
- the agricultural sector in conjunction with the NAMC and the former DoA should draft tariff proposals before submission to the Minister of Agriculture and the International Trade Administration Commission (ITAC)
- closer working relations must be forged between the Dti, the former DoA and the NAMC regarding international trade matters
- greater attention should be paid by the former DoA, the former Department of Foreign Affairs (DFA) and the Dti to bilateral trade arrangements given the collapse of the WTO negotiations. There

is much dissension and confusion over international trade policy and administration. Coherent and clear policies and procedures must be devised by government

- more simplified tariff regime must be developed by former DoA as part of the agricultural trade and tariff strategy in the interest of consistency, transparency and predictability
- tariffication arrangements should not be allowed to exist beyond effective periods. In the interest of consumer welfare, tariffs must be more regularly revised by government as conditions change
- the former DoA should place more agricultural trade attaches in new international markets especially to assist industries with market intelligence and trade matters
- the former DoA, in collaboration with the Dti, should introduce an incentive programme to assist firms with entry into new markets
- the former DoA should consider the establishment of a dedicated body for international trade promotion, to be housed in the NAMC
- The Agricultural Trade Forum is a valued structure that gives effect to collaboration between the private and public sectors. However, government must ensure that structure moves from a consultative basis to a more proactive and formalised outfit
- government and industry leadership should develop closer collaboration with all southern hemisphere competitors in shared markets and in areas such as research, information and market intelligence.

2.4.1.7 THE ROLE OF THE PRIVATE SECTOR

Deregulation had a net positive effect on the industry, despite the valid concerns raised. The implication is that markets take greater responsibility for industry matters. This approach must be further advocated by the state.

Industries should be further incentivised by government to take greater responsibility for the design and execution of development programmes such as land reform, black farmer development, mentorship, Broad Based Black Economic Empowerment, etc.

Industry bodies should refrain from attempts to re-regulate the industry and keep effective checks on uncompetitive behaviour which should be brought to the attention of the state.

Industries and firms should make a more concerted attempt at transformation especially addressing youth and gender aspects. The gross under-representation of women in industry structures as well as targeted gender programmes was noted.

2.4.1.8 TRANSFORMATION

Deregulation and trade liberalisation did not deliver better market access for black farmers, who lack the benefits of a supportive environment. Hence, support measures and marketing incentives must be developed by the Directorate: Marketing and the NAMC.

Preferential and concessionary marketing assistance measures (including incentives) must be designed to complement other development programmes, extension, etc.

Marketing support schemes must preferably be executed by the private sector with state assistance.

Hard transformation targets must be set in agricultural marketing and enforced where possible (e.g. %exports, %procurement, %employment, %trade, participation in the value chain, etc.), as envisaged in Agricultural Black Economic Empowerment strategy.

2. 4.1.9 RESEARCH

The recommendation was that the NAMC as an appropriate third party must be positioned to coordinate a credible economic research programme.

The private sector should co-fund the research programme based on their research priorities.

Research institutions especially universities must be capacitated and play an active part in the programme.

The NAMC must be tasked to investigate the possibility of state co-funding of technical research to supplement research funds raised by the levies.

International research collaboration must be encouraged.

A fervent effort must be made to ensure that a new cadre of young agricultural economists/professionals is developed who would provide the future intellectual capacity to government and industry

2.4.1.10 PROMOTION

The recommendation was that the NAMC, the former DoA and industry bodies should:

- make greater collective efforts to promote South African agricultural products in foreign markets
- develop promotional materials and strategies for local and international markets
- develop an incentive scheme to assist industries to grow and penetrate new markets.

2.4.1.11 INTELLECTUAL PROPERTY AND GEOGRAPHIC INDICATIONS

It was recommended that the former DoA must:

- consider proactive measures to protect local intellectual property and geographic indications of local products
- develop a public sector based intellectual capacity to support industries and protect future generations in this regard.

2. 4.1.12 CONSUMERS

The former DoA and the NAMC together with consumer bodies should ensure that:

- consumer interests are afforded greater priority and protection through effective and transparent information systems

- food security and food safety monitoring mechanisms are introduced
- costs and food price monitoring remains an ongoing programme
- a consumer desk is established in government to attend to consumer queries
- the research programme pays greater attention to consumer studies
- the capacity to conduct investigations into market structure and concentration in collaboration with the Competition Commission is enhanced.

2. 4.1.13 THE VALUE CHAIN

The former DoA and other appropriate state institutions should assist industries and firms to:

- enhance industry competitiveness by advancing the development of the value chain, much scope still exists
- pursue the many empowerment opportunities that exist in value chains
- access targeted incentive schemes to encourage the development of chains in close partnership with the Dti
- benefit from a logistics strategy as proposed by the recent logistics study

- have access to infrastructure, logistics and related intelligence which should become the key source of domestic competitiveness
- expand production across the SADC region based on comparative advantage, whilst value addition (physical and intellectual) should be located in South Africa.

The net impact of this process of policy reforms has also been assessed by the OECD (Review of Agricultural Policies in South Africa: 2006). The main conclusions of this assessment were:

- livestock farmers in South Africa receive as little support as their counterparts in countries such as New Zealand, Australia, Brazil and Russia
- the process of policy reform has benefited the agricultural sector as a whole. The gainers are the most efficient commercial farmers, and farm workers who have been able to retain positions as permanent employees. Those who have lost include those commercial farmers who have had to leave the sector, some 400 000 farm workers who have lost their jobs, and a smaller but significant number of farm workers who have lost permanent jobs and are now seasonal/temporary workers
- It is feasible that there have been some environmental benefits from these policy reforms.

2.5 STRUCTURE OF THE SOUTH AFRICAN LIVESTOCK INDUSTRY

The structure of the livestock industry is not much different from other structures in comparative countries in other parts of the world, including Australia. Deregulation had an effect of reorganizing more transparent

and voluntary organisations in the South African red meat industry to address common challenges. To a large extent, there are similarities in the manner in which South African and Australian red meat organisations were structured.

Until recently, SAMIC was a very important and active role player in the sector of agriculture. It played a very important advocacy role for the red meat industry. It had wide representation across the value chains, engaged government and the general public on matters of common interest, kept interested parties on local and international news in the red meat industry and was a very important partner in the sector. Experiences gained in its activities need to be shared with similar organisations in other parts of the world.

The following figures (figures 2.4 and 2.5 respectively) illustrate the structure of the South African meat industry and SAMIC

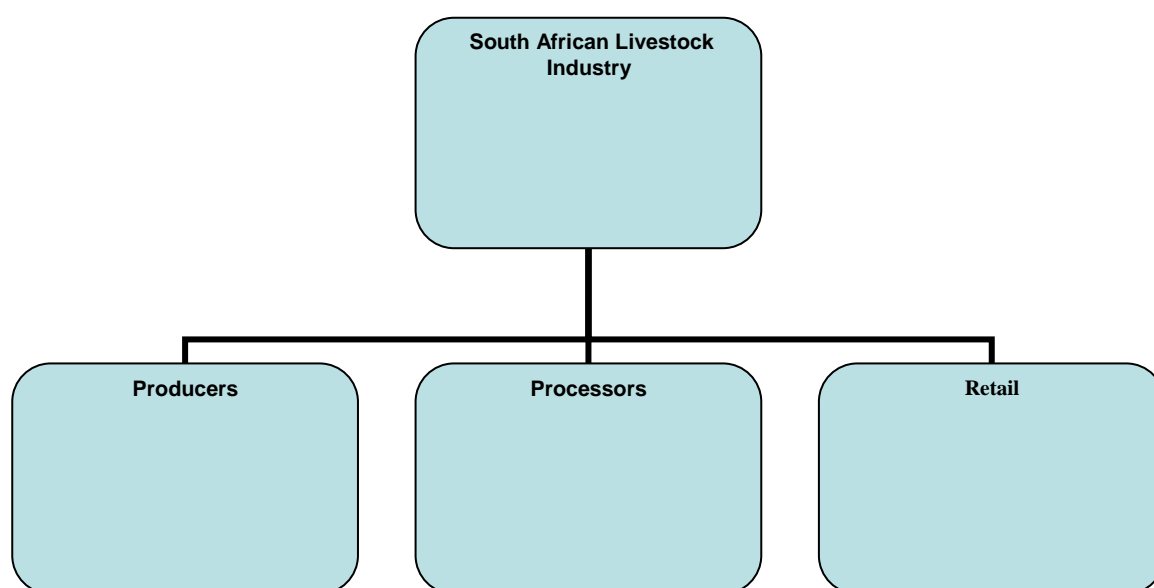


Figure 2.4: Structure of the South African livestock industry. By author.

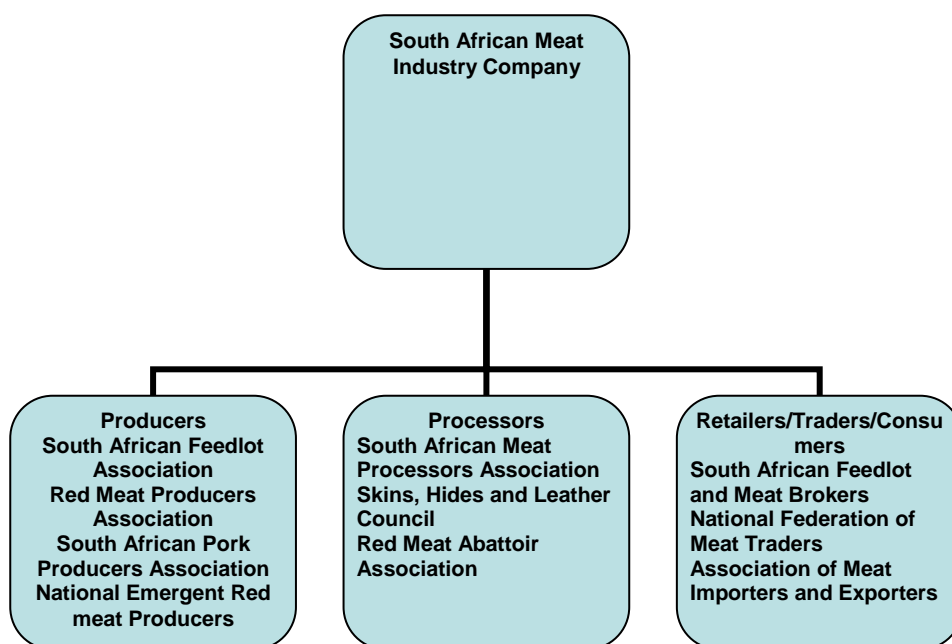


Figure 2.5: SAMIC – An overview 1997 – 2005.

SAMIC was a national representative apex structure of the South African red meat industry. SAMIC's establishment resulted from a need in the industry for an umbrella organisation that would ensure the effectiveness and survival of the industry in a deregulated environment. It originated from a zero base and therefore concentrated on functions essential to the future of industry.

The organisation's strategic objectives included enhancing the industry's domestic and global competitiveness, stimulate local and export market demand and confidence, influence legislation, trade and macroeconomic conditions to ensure sustained viability and growth and to promote humane and environmentally compatible practices. SAMIC was directly involved in government negotiations with foreign trading partners, support in the establishment of regional trading blocs and technological developments, sought to achieve appropriate quality control, traceability and product description systems. SAMIC was also involved in securing support as the custodian of industry from all role players and Government, acquisition and retention of necessary skills,

knowledge and experience, and securing funding required for its operations.

All sectors of the red meat industry were represented on the Board of the company and directors are appointed by the members they represent. Being appointed by the industry, the directors were directly accountable to their constituencies. The following were the members of SAMIC:

- South African Feedlot Association (SAFA)

The organisation disseminates to its members market, purchase and comparative production data. It also deals with issues of animal health, industry image building, and all affairs of industry relevance.

- Red meat Producers' Organisation (RPO)

The RPO is recognised as the autonomic organisation and mouth piece for commercial red meat producers and represents the highest authority within the red meat industry for producers. In partnership with the National Emergent Red meat Producers' Organisation, RPO strives to represent the interests of all primary red meat producers.

- South African Federation of Livestock and Meat Brokers (SAFLA&MB)

The organisation is involved in buying weaners and slaughter stock. It is also involved in organising auctions for livestock and game, game hunting packages and livestock improvement. Members also offer insurance services to the livestock and game industries.

- South African Pork Producers' Organisation (SAPPO)

SAPPO is the mouthpiece of commercial pork producers in South Africa. The organisation serves the South African pork producer by liaising within the agricultural fraternity and various role players within the supply chain of the meat industry, government and international interest groups.

- National Emergent Red Meat Producers Organisation (NERPO)

NERPO is a farmer organisation representing smallholder red meat producers of South Africa as well as smallholder cattle breeders and feeders. The formation of this organisation was necessitated by disparities in terms of access to resources, opportunities, support skills and capacity between members of the established red meat sector and the smallholder sector whose membership is predominantly from the historically disadvantaged communities. It should be noted that members of NERPO were respondents of the investigation of this dissertation.

- South African Meat Processors Association (SAMPA)

SAMPA is a voluntary association of other stakeholders in the meat processing and related industries. Full membership requires involvement in meat processing in South Africa.

- National Federation of Meat Traders (NFMT)

NFMT was formed in 1990 to represent the interests of the distributive meat trade at a national level. The federation is the only recognised organisation which is representative of all role

players in this particular sector of the meat industry in South Africa.

- Skins, Hides and Leather Council (SHALC)

The Council represents the interests of its members involved in the hide, skin and leather industry. The Council responds to matters affecting or are likely to affect the interests of the industry.

- South Africa Consumers Union (SANCU)

A united, responsible voice, SANCU is a voluntary autonomous body which represents millions of consumers. Amongst other functions the union strives to form a united consumer front that will co-ordinate all views of consumer – related matters and to resolve the problems of consumers satisfactorily.

- Association of Meat Importers and Exporters (AMIE)

AMIE's aim is to promote and safeguard the common interests of members in their activities as meat importers and exporters.

- Red Meat Abattoir Association (RMAA)

The overall objective of the association is to provide representation and services to the abattoir industry which will ensure the highest standards of meat safety, and quality to the benefit of the industry and the customer. Buyers of livestock, affiliated to SAMIC will be subsequently interviewed to give information on buyer requirements for livestock during the course of the investigation.

Unfortunately, due to financial, governance and other constraints, SAMIC has just recently restructured and is now mainly focusing on quality assurance and related matters within the abattoir industry. The capacity that was created by this organisation in the early days of deregulation, however, remains intact amongst the members.

2.6 THE INTERNATIONAL PERSPECTIVE

Lastly, it is useful to address the position of deregulation of the South African livestock market within the international framework. Developments in the field of agricultural policy always show a close correlation with general economic thought. Government involvement in the economy was a worldwide phenomenon after the Great Depression. Central regulation gained momentum after the Second World War through the sixties, not only on the national, but also on the international arena. However, towards the end of the sixties it became clear that interventionist policies had not been as successful as had been expected. This realisation paved the way for a movement towards increasing deregulation and privatisation over a wide front. Smaller governments became the catch phrase, interventionism fell into disrepute and the world moved towards more market oriented economic policies. Similar trends occurred in agriculture, as a specific sector of the general economy.

Following the Second World War the notion of national food self-sufficiency was increasingly propagated in both the developed and developing countries. The creation of the EU's Common Agricultural Policy was a milestone in this respect. Institutions such as the World Bank and bilateral aid agencies encouraged developing countries to strive for food self-sufficiency at the national level.

Regulated policies resulted in increased food production, global surpluses and unsustainable expensive stockpiling of food. However, malnutrition and hunger continued unabated in many parts of the world. This gave rise to proposals for a shift to policies aimed at ensuring food security at the household level rather than food self-sufficiency at the national level. In practice the shift in policy meant a focus on trade opportunities to exploit the comparative advantages of different producers and regions, both domestically and internationally. Examples of such a shift in policy are to be found in the agricultural liberalization in countries such as the USA, New Zealand, Australia, Chile, Kenya etc.

For an example, New Zealand emerged from the Second World War with a highly regulated economy as a result of wartime restrictions and foundations laid down earlier. Wealth had expanded owing to the maintenance of trade throughout the war and income surpluses accumulated on commodity trading with Britain under wartime conditions.

The agricultural sector dominated trade but the industrial sector continued to work towards self sufficiency in import requirements as far as possible. In the immediate post-war years, expansion was rapid, but in time it was restricted by the narrowness of the export base, fluctuations in commodity income and ever-increasing demand for imports. Internal expansion drew to a halt through balance of payments shortfalls. In both 1974 and 1979 oil prices caused deterioration in New Zealand's terms of trade and competitive advantage was lost as internal prices inflated.

In 1984 the New Zealand Government structured a set of reforms that provided prospective benefits to farmers in the form of lower costs, at the same time as they phased out subsidies. Prior to the

1984 reforms, high farm subsidies in New Zealand were partial compensation for the import selection policy and attendant policy interventions. However, farmers recognised that subsidies were not a sustainable solution. The prospect of freer imports in return for farm subsidy elimination was credible in 1984 because moves had been underway for some years to reduce import protection. A significant factor was also the signing of the free trade agreement with Australia in 1983. The Australian and New Zealand Closer Economic Relations Trade Agreement (ANZCERTA) include all food and agricultural products and a joint food standards authority to prevent non-tariff barriers.

The country's current macroeconomic climate is much more stable than it was in the 1980's and the agriculture sector operates in a freer market environment that contributes to growth in productivity and incomes. Essentially this means that the farmers have to assume a greater portion of market risk. The post-1990 reforms have further enabled the agriculture sector to benefit from greater synergies, better use of resources, and market signals. www.abareconomics.com/interactive/ausNZ_ag/htm/nz_reforms.htm.

The developing world's most important trading partner in agricultural goods is the EU. In the livestock sector, the EU is the second largest exporter after Australia. What the EU does, in terms of protecting its own, has a major impact directly or indirectly on producers elsewhere. For example, in the 1980's the EU dumped shipments of beef to West Africa thus crippling local livestock farmers. The effect on cattle farmers and traders in the region were devastating. Prices fell into half. People who once ate beef produced in Burkina Faso, Mali and Niger turned to cheaper EU beef. After a decade of dumping, the EU realised what was happening, not least the local livestock projects that were, at the

same time, being funded by the European Development Fund. In one year-1994, the EU beef imports into West Africa fell by 60% after this, local livestock producers were at least able to return to investing in their own herds.

What happened next was that the EU then turned its attention to another market, that of South Africa. Conveniently in September 1993, the South African government had lifted restrictions on the quantity of beef imports in order to comply with the 1993 GATT (General Agreement on Tariffs and Trade) Uruguay Round Agreement on Agriculture. Imports of beef from the EU rose from 6 600 tons to almost 46 000 tons per year within the next five years. This time it was Namibia that caught the cold. The Namibian beef industry was developed on the basis of supplying in the South African market with cheap cuts of low quality beef for processing, exactly the same quality as that being dumped by the EU. In 1997, history was repeated and the EU imports fell dramatically. Local livestock producers could not compete on an equal footing with the imports. Commercial and smallholder livestock farmers suffered great losses.

A question could be asked why the actions of the EU manipulated overseas markets and the agricultural producers that are dependent on them. For years, thanks to the generous support of the Common Agricultural Policy, EU countries have produced more beef that they can eat or export under normal commercial terms. In order to sell competitively on the world market, EU producers must be heavily subsidised if they are to recoup their own production costs and survive commercially. These subsidies take a variety of forms but it is the system of export refunds that has most directly affected markets in importing countries. Export refunds are paid by the EU to its own producers to the tune of € 1billion per year. In fact, they allow specific products to be sold to certain destinations

at a competitive price despite the higher cost of production. The reason why the level of EU beef exports to West Africa and South Africa fell so suddenly is that export refunds to those regions were reduced at a stroke, by 28% and 70% respectively.

The Cairns Group is a diverse coalition of 19 agricultural exporting countries. A diverse coalition bringing together developed and developing countries from Latin America, Africa and the Asia-Pacific region, the Cairns Group has been an influential voice in the agricultural reform debate since its formation in 1986. The Group has continued to push for the liberalisation of trade in agricultural exports, a cause that unites the Group across language, cultural and geographic boundaries. The Group is committed to achieving free and fair trade in agriculture, which provides real and sustainable benefits for the developing world. Members of the Cairns group are Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Malaysia, New Zealand, Pakistan, Paraguay, Peru, the Philippines, South Africa, Thailand and Uruguay. (www.cainsgroup.org/introduction). The Cairns Group's objectives focus on implementation of deep cuts to all tariffs and removal of tariff escalation, the elimination of all trade-distorting domestic subsidies, the elimination of export subsidies and clear rules to prevent circumvention of export subsidy commitments.

Besides deregulation in most countries, the most developed countries of the world have been blamed for not honouring their WTO obligations by continually offering farming subsidies to their farmers. For example, amongst the biggest recipients of subsidies are the farmers living in the richest countries in the world. Furthermore there is also a huge imbalance in the subsidies received in a country. For example,

- In Germany 14% of the biggest agricultural producers get 65% of all payments and 1510 individual producers get € 602 million between them
- In France 29% of the biggest agricultural producers get 72% of all payments and 20 individual producers get € 9.85 million between them
- In the UK 31% of the biggest agricultural producers get 84% of all payments and 460 individual producers get € 211 million between them
- In Italy 1.6% of the biggest farm producers get 34% of all payments and 200 individual producers get € 133 million between them. (www.oxfam.org.nz/news - G8 subsidies contributing to WTO crisis).

In 2003, a study by the United States Department of Agriculture indicated that 30% of farm subsidies go directly to only the largest 6% growers. In the case of sugar 42% of benefits go to just 1% of growers. (Powell, B 2005: 1.)

Twenty (20) trade ministers, who met under the auspices of the 53 member of the African Union (AU) called on the USA to indicate when it would stop subsidising its farmers, as the Doha Round of World Trade Organisation (WTO) negotiations got close to conclusion in 2006. This round began in 2001 at a WTO ministerial conference in Doha, Qatar. The negotiations sought to reduce trade barriers and make trade fairer for developing countries. The talks subsequently continued in Cancun, Mexico, Geneva, Switzerland and Hong Kong, China in 2003, 2004 and 2005 respectively. These negotiations failed to make headway because agricultural protectionism, including agricultural subsidies to farmers, has continued to be observed in rich countries.

www.allafrica.com/stories-Africa: U.S. Farm Subsidies hurt Africa's Progress: 1-2).

As part of the Farm Bill, the USA agricultural support is similarly skewed toward its biggest producers. The top 10% of its biggest agricultural producers continued to get more than 72% of its \$ 23 billion subsidy programme in 2005. Meanwhile, 60% of all US farmers do not collect any government subsidies. The figures make a mockery of the claim that the Farm Bill is geared towards small-scale farmers and rural development. The vast majority of subsidies are going to the biggest agricultural producers. These subsidies continue to promote over-production and dumping, hurting poor farmers in developing countries.

2.6.1 THE GLOBAL MARKET FOR RED MEAT

2.6.1.1 UNITED STATES OF AMERICA

According to the Food and Agricultural Policy Research Institute (FAPRI) growth in USA beef exports outpaced import growth in the last few years. The expectation is that the USA will ultimately become one of the world's largest beef exporters.

On the other hand the USA is by far the most untapped export market from a South African red meat perspective. The USA currently imports more than 1.6 million tons of red meat annually. With South Africa being eligible to export tariff free to the USA under the US-SA trade agreement, vast opportunities for local red meat producers exist. One of the biggest stumbling blocks at this stage is equivalency with regard to meat inspection. To become eligible to export red meat to the USA, South Africa's red meat inspection system must undergo a rigorous and lengthy review process to determine whether it is equivalent to that of the USA. It is envisaged that this process will take some few years to

complete. (Report on the investigation into the effect of deregulation on the red meat industry: 22.)

2.6.1.2 MERCOSUR COUNTRIES

The implementation of a free trade agreement between MERCOSUR countries and South Africa could be to the detriment of the local red meat industry. As large and generally low - cost meat producers, South American countries (Brazil, Argentina and Uruguay) could pose a major threat if tariff free trade is instituted.

As consumption in the South American countries is already on a relatively high level, and they generally have FMD free status, it is projected that they will gradually make inroads into other foreign markets. It is foreseen that their beef exports could grow by approximately 3.8 per cent per year on average in the next decade. In the last few years, South Africa imported approximately 1 238 tons of beef from Brazil, Argentina and Uruguay per annum. It was expected that this amount could increase considerably if the proposed agreement is to be implemented.

In the light of the above-mentioned, consideration should be given that a special protocol is drawn up for beef in the proposed agreement. (Investigation into the red meat industry *op. cit.* 24.)

2.6.1.3 THE AFRICA PERSPECTIVE

Despite many problems in Africa (for example, political instability and animal diseases), the African continent has great potential for increased production and trade within Africa and with other continents. Land is available and cheap in Africa while labour is also available at low cost. Countries with large cattle populations like Ethiopia (27 million) and

Tanzania (14 million) could reorganise their livestock industries and export meat. Kenya with adequate disease control also has the potential to export meat. A change from communal system of livestock production to more productive systems in countries like Botswana, Swaziland, Zambia, Angola and other can greatly increase production without necessarily using more land.

Most countries in Africa however need better access to major world markets of Europe, Asia and North America. Tariff barriers are a major impediment to trade between Africa and these regions, while animal health and hygiene regulations in some of these countries are a major barrier to trade. Veterinary requirements in Korea, Japan and USA make trade between them and Africa impossible. The European countries' tariffs and quotas plus the ban on the use of hormones also limit trade between Africa and Europe. In general it seems that Africa, under the present WTO rules which allow some countries to continue imposing trade barriers, has very little opportunities to increase trade and participate fully in the world meat market. (Investigation into the red meat industry *op. cit.* 24.)

2.6.1.4 THE SADC AGREEMENT

The SADC agreement entails that tariffs on red meat will be reduced by South Africa to zero over five years, i.e. five equal cuts with the first cut on 1 September 2000. Tariffs on certain tariff lines, i.e. those with a tariff lower or equal than 25 per cent but higher or equal than 17 per cent, will be eliminated in three steps, while those tariff lines with a tariff lower than 17 per cent will enjoy zero tariffs as of 1 September 2000. Certain pork and mutton cuts will fall in this category. Where specific tariffs apply, these will be eliminated in five steps over five years. Sanitary requirements will still be applied. The non-SACU SADC countries in turn have up to 12 years to reduce tariffs to zero, not necessarily in equal cuts.

The different red meat industries in most of the SADC countries established a representative body for the region, namely the Southern African Livestock and Meat Forum (SALMF). The mission of the SALMF is to establish a sustainable livestock and meat industry in the SADC region. The following strategic objectives were identified, namely:

- to unite the industry and to create an industry-wide regional representative body that will act as a united mouthpiece for the industry
- to lobby/influence government policies and
- to create a viable and profitable business environment.

The SADC livestock structures consist of two sub-committees, namely the Sub-committee for Veld, Animal Production and Marketing and a Technical Committee on Animal Health. SALMF strives to work very closely together with these Committees. In order to do that, SALMF obtained observer status on these Committees. Smallholder farmers also have ample opportunities to participate in this regional market. (Investigation into the red meat industry *op. cit.* 25.)

2.6.1.5 OUTLOOK FOR RED MEAT IN SOUTH AFRICA

The opinion is that the South African red meat industry could expect an improvement in market prospects. Moderate international feed prices and tightening restrictions on subsidised exports should continue to strengthen world prices. Local red meat prices should benefit due to less distorting export subsidies by the EU and USA. South Africa, however, will increasingly be exposed to foreign suppliers. This will require increased efficiency on the part of the local producers to be able to compete against low cost imports from Australia, New Zealand,

Brazil, Argentina, etc. (Investigation into the red meat industry *op. cit.* 25).

2.7 CONCLUSION

There is no doubt that deregulation of the South African agricultural marketing environment has benefited the smallholder livestock producer. A major gain was the doors that were for the time opened for the farmer to participate fully in mainstream livestock marketing processes.

The major challenge that the new livestock producer faces is the inability to compete with the commercial farmer both in domestic and foreign markets. There is therefore a need for government to kick start this segment of the sector through the transfer of the much-needed support services. It would however, be advisable that the support is not wasted, but channelled to those livestock enterprises that have benefitted from other state programmes such that success is enhanced.

The importance of accessing market related information by the smallholder livestock farmer cannot be overemphasised. Partnerships with the commercial sector, the DTI, industry organisations and other relevant parties need to be strengthened with this sector. In the next chapter the marketing environment and the Marketing Information Systems will be discussed.

CHAPTER 3: MARKETING PROCESSES AND MARKETING INFORMATION SYSTEMS

3.1

INTRODUCTION

In the previous chapter an analysis of the livestock market and its effect on the marketing activities of the smallholder livestock farmer was discussed. From the discussion, it was highlighted that a key support service required by the smallholder livestock producer is access to relevant livestock marketing information. This chapter will focus on the marketing processes which *inter alia* refers to the marketing information systems. From here the author will discuss the status of livestock marketing systems in South Africa and elements of an ideal livestock marketing information system. Existing information gaps will be highlighted and recommendations to address these information gaps will be forwarded.

The Food and Agriculture Organization of the United Nations (2003) posits that farmers have to take greater responsibility to market their agricultural products. Whether they are seeking to sell their products or to market new ones, they need to have information about markets and prices. As mentioned in Chapter 1, the type of information they need can be summarized as:

- who and where the buyers are, how they can be contacted, what their conditions of business are, what their preferences for varieties, packaging and delivery, etc
- immediate and current prices to help farmers decide whether to sell their products on a particular day, or wait in the hope that the price will rise, or which enable them to decide if the price offered by the trader, “speculator” or processor is a reasonable one
- longer term or historical price data over a number of years, which helps them to decide for example, whether it would be profitable

to start growing new crops or rearing animals, to grow crops out of season or to seek to produce higher quality crops.

From the above discussion, it should be clear that marketing information needed by the any farmer is basically information on the marketing mix elements. These elements are the product, price formation, distribution channels and promotion or the well-known (4P's). Marketing information revolves around information on each of these elements as well as information regarding the customer. Information on these elements also serves as the basis for the development of a sustainable marketing strategy and its implementation.

To get a clear understanding of what constitutes a livestock marketing mix, first, there is a need to have concise definitions of marketing, the marketing process, marketing information and the nature, role and importance of a marketing information system.

The above-mentioned concepts remain the same and are applicable in all sectors of any economy including agriculture. After the analysis of these concepts, discussion will thereafter focus on what constitutes the livestock marketing mix.

Linked to this discussion, subsequent sections will thereafter first focus on the articulation of livestock requirements by various target markets who in this case, are the buyers of livestock. A target market is a group of people or entities who are interested in a common product, in this case, livestock.

Secondly, an investigation into the gap of knowledge and marketing information needs of smallholder livestock farmers in the Moretele area in the Bojanala Platinum District Municipality in the North West Province will then be made. Recommendations on what needs to be done to close the information gaps will be made.

3.2 THE MARKETING PROCESS

Marketing can be defined as an organisational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organisation and its other stakeholders. Armstrong and Kotler (2004:7) add to this by defining marketing as a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging value with others.

Clow and Baack (2010:6), define marketing as an activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners and society at large.

Again, Clow and Baack (2012:1), explain marketing as discovering consumer needs and wants, creating the goods and services that meet those needs and wants and pricing, prompting and delivering those goods and services.

Du Toit, Erasmus, & Strydom (2010:365) define marketing as management tasks and decisions directed at successfully meeting opportunities and threats in a dynamic environment, by effectively developing and transferring a need-satisfying market offering to consumers in such a way that the objectives of the business, the consumer and society will be achieved.

From the above definitions, a marketing process could therefore be defined as a set of activities in the planning and execution of distribution, promotion and pricing of goods and services to create exchanges that satisfy individual and organisational objectives.

The figure below presents a simple five-phase model of the marketing process as explained by Armstrong and Kotler (2004: 7). Each of the phases will be described in detail below:

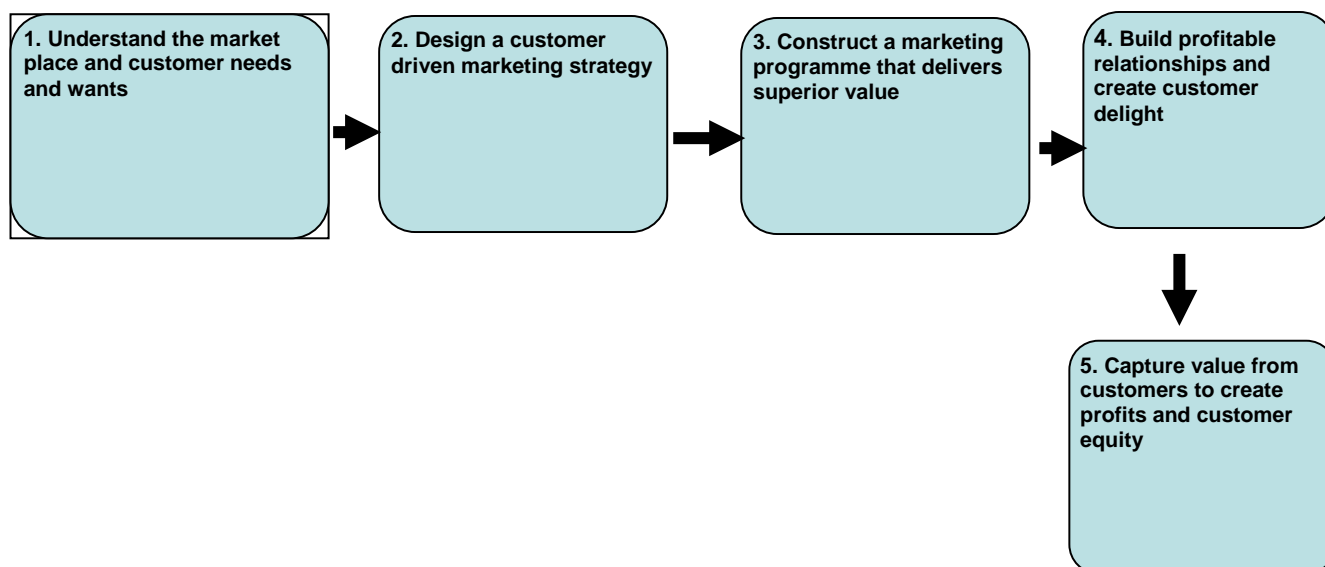


Figure 3.1: The marketing process (Source: Armstrong and Kotler *op cit.*)

A discussion of each phase and its relevance to the livestock industry follows:

3.2.1 PHASE 1: UNDERSTAND THE MARKET PLACE AND CUSTOMER

The marketing environment can be described as actors and forces outside marketing that affect marketing management's ability to build and maintain successful relationships with target customers. The marketing environment is made up of micro and macro environmental variables, Kotler and Armstrong (2005:65).

The market place in which agriculture operates can be divided between the macro, market and micro environments. The macro variables that constitute the external environment are competitive, economic, political-legal, socio-cultural and technological variables. Macro variables are not controllable by one entity.

Kent. R. (2007: 567), explains the macro environment as the wider environment of a commercial organisation that consists of general economic players like financial institutions, trends in the economy, technological factors, political players including governments, local authorities, trade unions and legal factors.

Gilligan and Wilson (2009:170-178), further explain the macro environmental factors as the political, economic, social and technological variables.

Although Armstrong and Kotler refer to two environments, namely the macro and micro, Du Toit et al (2010:101) refer to three environments namely the macro, market and micro. This approach will be followed in this dissertation.

The micro environment is made up of controllable variables which can be immediately influenced by the organisation. This process of examining the macro, market and micro environments is known as the situational analysis. As the name implies, it defines the circumstances that the marketer confronts as he/she prepares to develop a marketing strategy.

A brief description of the nature of each major macro variables will be explained below thereafter an examination will be made of what constitutes the market and micro variables respectively. The relevance of the above concepts to livestock marketing will also be addressed.

3.2.1.1 THE MACRO VARIABLES

The following macro variables will be discussed:

3.2.1.1.1 COMPETITIVE VARIABLES

Competition, domestically and internationally, is a very important part of the macro environment. It is always important to know what competitors do. It is always wise to know who enters and who has left the market to be able to come up with feasible and sustainable marketing strategies.

Agriculture is always dominated by competition between similar products. For example, there is always competition in different types of red meat based on price. If the price of beef is higher than that of mutton, consumers will tend to buy mutton instead of beef due to the price differentials. Competition can also play out between substitute products having similar attributes. For example, soya and chicken are substitute products as both have high protein content. The consumer has a choice of either purchasing and consuming soya or chicken to satisfy protein needs that a human body requires. On a similar vein, fish, eggs or cheese are also substitute food products with high protein content.

In the past there was a trend towards consumption of fish and chicken in substitution of red meat. Red meat producers need to keep track of these consumption trends.

3.2.1.1.2 ECONOMIC VARIABLES

It is always wise to keep track of what is happening in the country's economy. The three areas of greatest concern are the disposable income of consumers and the threats of inflation and recession. The higher the disposable (or after tax) income is, the more families and individuals can afford to buy products. Another area of great interest is inflation. Inflation is a general rise in prices resulting in decreased purchasing power.

The last area of importance is recession. Recession is a period of economic activity when income, production and employment tend to fall, all of which reduce demand for goods and services. A practical example is that the current global economic meltdown has had a recessionary effect of most countries' economies, including South Africa.

As international financial markets continue to tumble and national economies slip into recession, the fear of a global meltdown has begun to haunt people everywhere. Analysts, commenting on the phenomenon have drawn parallels with the Great Depression of the 1930s. What began as a financial crisis in East Asia in 1997 has now developed into a full-blown global economic crisis affecting world economies including that of South Africa.

South Africa is a middle-income, emerging market with an abundant supply of natural resources, well-developed financial, legal, communications, energy and transport sector and modern infrastructure supporting an efficient distribution of goods and major urban centres throughout the Southern African region.

Real gross domestic product at market prices increased by 1.3% quarter on quarter for the second quarter of 2011. The unadjusted real GDP at market prices for the first six months of 2011 increased by 3.3% compared with the first six months of 2010.

Again, the contribution of Agriculture, Forestry and Fishing to the national GDP at constant 2005 prices continued to decrease from 3.10% in the 2000 to 2.6% in 2010 (Statistics South Africa P0441 2011)

3.2.1.1.3 POLITICAL- LEGAL VARIABLES

The political-legal environment consists of government rules and regulations that apply to organisations. As mentioned previously, the

South African agricultural market environment has, for years, been subjected to strict agricultural market regulation. Since the introduction of the Marketing of Agricultural Products Act in 1996, however, most agricultural markets went through deregulation and are now experiencing a freer economy ruled by supply and demand.

What continues to pose as a challenge to agriculture are cheap imports from mostly developed countries which heavily subsidise production and marketing of these products. The extent of the damage of these heavily subsidised livestock imports were explained at length in Chapter 2.

3.2.1.1.4 SOCIO-CULTURAL VARIABLES

The socio-cultural environment consists of institutions, people, and their values, and the norms of behaviour that are learned and shared by its people. It is the people, who they are, where they are, how they live, what they think and what values they hold making up the social fabric of society. Culture impacts heavily on the choice of products and services.

For example, people belonging to the Hindu religion do not eat beef, there would therefore not be any point to develop marketing strategies targeting this group with beef, because they will not buy it. Again people of Muslim religion only eat “hallal” food. The livestock has to be slaughtered in a certain manner, in line with the religion. To be in a position to penetrate this market, certain parts of the abattoir industry are designed to slaughter livestock in line with the rules of the religion.

Within the black African population, certain religions do not allow the members to eat pork, beef, and mutton, etc. All these beliefs and cultures do impact on how people purchase such products.

On a social front, as mentioned in the Chapter 2, livestock trading constitutes about 40% of total agricultural trade, an aggregate equivalent of R632 billion per annum. Though the red meat industry is still one of the most important agricultural subsectors in South Africa, it has come under increased pressure following important changes in the lifestyles and preferences of consumers. Dwindling demand for red meat can be attributed to a decline in the per capita demand by consumers who are becoming more health-conscious and substituting poultry and fish for red meat. Despite this trend, the red meat industry has, in the last few years, been involved in reversing this trend by embarking on promotional campaigns emphasizing the benefits of using red meat as a source of protein.

3.2.1.1.5 TECHNOLOGICAL VARIABLES

Technology is a nation's competence to provide goods and services for its people. Technology follows no course, seeks no ends, hold no values. It is a part of nature giving meaning, substance and function by people. There is a direct relationship between technology and the level of development for any country. The higher the level of technology the more developed the country and vice versa.

The importance of technology in the development and distribution of market-related information cannot be overemphasised. In the last chapters, it was mentioned why access to agricultural marketing information is crucial in ensuring meaningful participation of all farmers in mainstream marketing activities.

The introduction of technology such as the Internet has benefitted farmers in particular to learn about prevailing market prices, price trends, current marketing activities, opportunities, threats, etc. By making use of the Internet, farmers can also learn about export market requirements, logistics, purchasing trends, contact organisations in

foreign markets, etc. This kind of technology has enabled South African farmers to compete effectively in certain markets with other producers located in other parts of the world.

Within the smallholder agricultural sector, the use of cellphone technology has shown to be a very effective tool in narrowing the digital divide between the developed and the developing sectors of the agricultural community. Due to the effective use of this technology, smallholder farmers are now in a position to get more market-related information such as daily, weekly or monthly prices for their agricultural commodities. Livestock prices and market-related information is disseminated through the use of the above-mentioned tools.

Through the web based system, whose web site address is <http://webapps.daff.gov.za/amis>, the Directorate: Marketing of the national Department of Agriculture, Forestry and Fisheries, is in an ongoing process to package market-related information used by all in the development and implementation of agricultural marketing strategies. This is an activity that will be implemented by the department for years to come in an effort to empower farmers to participate effectively in local and international agricultural markets.

Now that macro variables have been studied, the next focus is to look at what constitutes the market environment:

3.2.1.2 THE MARKET ENVIRONMENT

Having analysed changes in the macro-environment, the marketer needs to establish a target market through the identification of opportunities with particular emphasis to the livestock marketing environment.

A target market is a group of people or entities interested in a product. Members of a target market have something in common which could include similar tastes and preferences, belonging to the same income bracket, religion, ethnic group, age group, etc.

Marketing intermediaries are key players in the market environment and form part of the distribution chain of a product from its place of production to the ultimate consumer. Market intermediaries are independent business organisations that are directly involved in the flow of products and services between a marketing organisation and its markets. These intermediaries include reseller institutions such as wholesalers and retailers. In livestock agriculture, resellers of red meat such as supermarkets, butcheries, abattoirs, feedlots, and supermarkets are important buyers and therefore important intermediaries. Abattoirs and feedlots handle the bulk of livestock within the industry.

Various facilitating organisations provide services such as transportation, warehousing, storage and financing that are needed to complete exchanges between buyers and sellers.

There is a very close interdependent relationship between livestock channel members. A concern has always been that there should be healthy competition between and amongst these channel members such that no artificial increase in consumer prices occurs. So far, the red meat industry has not been subjected to vigorous and intensive investigations on price collaboration accusations by South Africa's Competition Commission, unlike some of the industries that have had problems with the Commission lately.

3.2.1.3 THE MICRO ENVIRONMENT

The micro environment consists of the managerial processes that exist within the organisation. Focus here is the internal capacity of the organisation to produce and maintain lasting relationships with its customers. Internal managerial capacities include financial, human resources, research and development, production, as well as marketing capabilities. It is important to collate and integrate these managerial capacities such that optimal use of resources to produce a good product for the target market is achieved. Part of the empirical research will look at the smallholder farmers as the customer of information to be received to enable them to operate optimally.

Before a marketing strategy can be developed, it becomes important for any marketer to take into consideration the effect of these above-mentioned variables. The situational analysis enables marketers to identify opportunities and threats that need to be taken into consideration when developing marketing strategies.

There are cases of changes in the macro environment which force livestock producers to change company strategy. For example, early during this decade, the livestock industry was affected by the outbreak of the Foot and Mouth Disease (FMD). Most international markets were closed for South African livestock imports, mostly in the Middle East, and Europe. This forced the producers to refocus into the domestic market and thereafter rebuilt old and new markets after the country was again declared FMD free.

One advantage of the more established livestock producers is that they have very strong managerial capacities compared to the smallholder livestock producer. This is why that one key intervention that government has put forward is mentorship programmes, where managerial and technological skills are transferred from commercial to

the smallholder livestock farmers. This process is proving to be very helpful and sustainable. In some cases, farmers get into formal partnerships in the running of their businesses and this is proving to be a beneficial win-win situation for all.

Once a thorough situational analysis has been made, the next step is then to design a customer driven strategy that will facilitate penetration into the target market.

3.2.2 PHASE 2: DESIGN A CUSTOMER DRIVEN MARKETING STRATEGY

A marketing strategy can be described as the marketing logic by which a business hopes to achieve its marketing objectives. Once the target market has been identified, a plan of action or strategy for the delivery of a product to the target market needs to be designed.

First, the marketer has to ensure that it develops a product that is wanted or needed by the market. Product characteristics have to be analysed. In many instances, the product will have to be tested to the target market for suitability and acceptability. In other instances a new product will have to be developed to accommodate needs of a new market that has been identified.

Secondly the marketer has to take time to develop a pricing strategy for its product. Depending on the role that the marketer wants to play in the market, various pricing strategies can be developed. If the objective is to gain a large share of the market, the marketer will usually use the market penetration strategy. In this case, a lower price than that prevailing in the market will be charged for the product. Due to the fact that more people will be able to afford the product, the marketer may dominate the market by having more customers than its competitors.

Alternatively in an instant where the marketer needs to create a prestigious image about the product, a high price will be charged for the product. Sometimes the marketer may charge the going price in the market but try to differentiate the products in terms of quality, packaging as so forth to gain more market share.

Once the marketing strategy has been concluded it is now time to implement the strategy, by implementing the programme.

Based on the discussion in Chapter 2, there is no doubt that within the livestock industry, the most successful farmers are those who design and maintain a superior marketing strategy that effectively collates all the 4Ps. Deregulation of the South African agricultural marketing environment has also benefited the smallholder livestock producer as the doors are now open for the new farmer to participate fully in mainstream livestock marketing processes. It is now possible for the smallholder livestock farmer to develop a strategy and penetrate any target market, provided they are able to deliver on the requirements.

Despite this opportunity that is unfolding, the new livestock producer is still unable to implement a sustainable marketing programme mainly because of an inability to develop a good marketing strategy. This calls upon the smallholder livestock producer to access market-related information to be in a position to develop and implement a feasible and sustainable marketing programme.

The successful marketer is the one who will be flexible and assertive enough to change the strategy as changes within the marketing environment occur. The successful livestock marketer is the one who will be able to compete with foreign competition as was seen when livestock from heavily subsidised developed countries reached the South African shores. Only those livestock producers who are able to, amongst other things, maintain low operating costs, were able to

compete with these cheap imports, those who could not, could not survive. Unfortunately this is the reality that South African producers have to grapple with by accepting that this country is now part of a global economy, susceptible to fair and unfair competition.

On a positive note, when an insatiable market for goat meat was identified in the Middle East, both commercial and smallholder goat farmers continue to penetrate this market. Once these threats and opportunities are identified, the next step is to construct the most appropriate marketing programme which involves the actual implementation of the strategy.

Once a feasible and sustainable marketing strategy is developed, the next is the implementation of the strategy.

3.2.3 PHASE 3: CONSTRUCT A MARKETING PROGRAMME THAT DELIVERS VALUE

This process turns the marketing strategy and plans into marketing actions in order to accomplish set marketing objectives. This phase focuses on the actual implementation of the marketing strategy or plan. It involves delivery of the right product, at the right price, to the right people at the right time. The product with the adequate product specifications and character will be developed or produced and made available to the consumer. This process is just as relevant and applicable in the livestock industry.

By this time, there should be clarity on the kind of pricing strategy to be followed. The product made available to the customer should have a price tag. If the price is lower than what is presently charged in the market, there is a likelihood that most consumers will prefer to buy the product. This market penetration pricing strategy is normally used when the product has reached the maturity phase of its life cycle. The

maturity phase of a product life cycle is characterised by competing products that have been in the market for some time. Consumers are looking at other advantages associated with the product which may include better packaging, quality or lower prices.

Implementation of the place or distribution strategy involves the process of ensuring that the product is made available to the consumer at the right time. In any economy various distribution channels are available for different products. The marketer has to choose a distribution channel most appropriate for consumers.

In the livestock market, these processes can be seen clearly when one is to track the animal from the farm through various channels to a point where meat is made available in butchery or a local supermarket, from farm to fork. There is always a very close relationship between the quality of livestock and price it fetches in the market. The higher the quality of livestock, the higher the price the buyer is prepared to pay. On the other hand, the lower the quality, the lower the price the buyer is prepared to pay. The latter state of affairs dominates the smallholder livestock sector, hence there is a need to educate the producer about this price-quality relationship.

An important variable that needs to be monitored are the changes in the price of livestock and the cyclical price trends. Farmers need to understand why livestock prices change. It is important for them to understand the relationship between supply (what people are prepared to sell at a certain price) and demand which is how much consumers are prepared to buy at a certain price. Short-term and long-term fluctuations which may be a result of changing consumer patterns, competition, dumping of exports from developed countries, etc. The Directorate: Marketing is also aware of these challenges and is involved in building the capacities of smallholder livestock farmers through training in understanding supply, demand and price fluctuations. The

Directorate: Marketing in partnership with provincial counterparts also organises exposure visits for these farmers to feedlots and abattoirs to get first hand information on how these markets operate.

All these interdependent variables need to be put in place and integrated to create lasting and sustainable relationships with customers. Implementation of livestock marketing strategies play out in the industry where as it will mentioned in this chapter, lasting relationships are established between livestock distribution chain members including feedlots and abattoirs. Trust and reliability is built over the years, where delivery of the right quality of livestock, is delivered at the right time and also at a reasonable and acceptable price is assured. The smallholder livestock producer has to be capacitated in such a way that they also participate in this manner within the industry.

3.2.4 PHASE 4: BUILD PROFITABLE RELATIONSHIPS AND CREATE CUSTOMER DELIGHT

Buyers of livestock such as feedlots and abattoirs have always maintained reliable and profitable relationships with commercial producers as the supply of livestock met their requirements. On the contrary, it becomes very difficult for these buyers of livestock to create lasting and trustworthy relationships with the smallholder livestock farmer because the product normally does not meet the buyer requirements. The last phase of the marketing process is to ensure that repeat purchases occur due to buyer satisfaction.

3.2.5 PHASE 5: CAPTURE VALUE FROM CUSTOMER TO CREATE PROFITS AND CUSTOMER EQUITY

In livestock marketing it is the producer of livestock who creates value and builds customer relationships with the end consumers. Consumers

are users of livestock and livestock products. The livestock consumer market is divided between ultimate and business users of livestock.

Business users of livestock include abattoirs, meat processors, feedlots and ordinary butcheries. Business users use livestock and products to create new products.

Ultimate users use livestock and livestock products for own consumption and satisfaction. These consumers of livestock can be further divided into for example, beef, and mutton, lamb, goat-meat or pork consumers.

In the above discussion, we analysed the phases that constitute the marketing process. There was an emphasis on Phases 2 and 3 where the marketing strategy and its implementation were discussed. Implementation of the marketing programme basically involves the process of the integration of the marketing mix elements such that marketing objectives are realised. The close relationship between the elements of a marketing mix and marketing information cannot be overemphasised. Marketing information is basically the gathered information on each of these elements of the marketing mix.

From the above, it is very clear that the process followed in the design and implementation of a livestock marketing strategy also follows the generic marketing processes. Development and implementation of the marketing process model is just as relevant in the livestock industry as in the marketing of grocery products. Now that an analysis of the marketing process and its relevance to the livestock has been made, focus will be on marketing information, the marketing information system and how these feature in the livestock industry.

3.3

MARKETING INFORMATION

Market information can be viewed as the information needed by the marketer to produce superior value and satisfaction for customers. Good products and marketing programme begin with a thorough understanding of consumer needs and wants. Marketers also need information on competitors, buyer requirements and forces in the market place.

In the past, most marketers were small producers and knew their customers firsthand. Managers picked up marketing information by being around people, observing them, and asking questions. Now however, many factors have increased the need for more and better information. In today's more rapidly changing environments, managers need more up-to-date information to make timely decisions. Using improved computer systems and other technologies, companies now can provide information in greater quantities.

During the launch of the Agricultural Marketing Information System, (whose website address changed from www.agis.agric.za/mis to <http://webapps.daff.gov.za/amis> in 2007, the former Minister of Agriculture and Land Affairs mentioned that the South African government deregulated agricultural markets and liberalised trade in line with global trends. This policy shift ensured that South African farmers could export a range of agricultural produce to the rest of the world and use the benefit created by expanded market access to expand their farming operations. However, a challenge rising out of the trading and marketing dispensation is that farmers are required to become business-minded entrepreneurs and be able to take decisions in terms of what to produce, how and for whom to produce, in line with contemporary market requirements.

The ability of farmers to respond intelligently to the production and marketing challenges rests on their ability to access, interpret and apply basic agricultural marketing information in their businesses. This agricultural marketing information is, in most cases not accessible by resource-poor smallholder farmers, thus leaving them with no option but to dispose of their produce at uneconomic prices.

The availability of prompt and reliable marketing information on what is happening in the market and what prices are quoted for different commodities are seen as necessary to improve the decision-making capability of the farmers and strengthen their bargaining power.

Because of generally low levels of literacy and distance from improved technology and communication systems, resource-poor livestock farmers cannot access and understand price information. This limits participation by smallholder farmers in mainstream marketing activities.

Careful selection and accurate identification of target markets is essential for the development of an effective marketing strategy for the smallholder farmer. Out of a few marketing channels available-resource-poor farmers still prefer to market their commodities through informal sales. There is therefore a need to provide regular information to this resource-poor farmer regarding alternative markets which will hopefully increase the profitability and return on capital.

For an example, according to the Agricultural Product Standards Act of 1990, the quality and value of livestock is determined by considering the physical characteristics of the animal which are age, fatness, confirmation, damage, sex and state of health.

Age plays an important role in the choice to buy an animal because the meat of young animals is most tender. South African red meat consumers prefer grades A, AB and B. Smallholder farmers normally

keep Grade C animals, these animals normally fetch the lowest prices in the market because of the toughness of the meat.

From a development point of view, being guided by the Agriculture Sector Plan, this state of affairs needs strong intervention. This intervention requires putting strong emphasis on educating the smallholder farmer on the price and product quality relationships. The smallholder livestock producers also need to be educated on various marketing channels available in the livestock industry. It has been mentioned in the previous chapters that lack of this knowledge does pose as a major constraint for effective participation of these farmers in major livestock marketing activities.

In fact, today's managers sometimes receive too much information. Yet marketers frequently complain that they lack enough information of the right kind or have too much information of the wrong kind. Marketing is so widely spread throughout the business that it takes great effort to locate even simple facts. Many marketing managers need more and better information. Most companies are now studying their managers' information needs and designing information systems to meet those needs

Now that there is a clear idea of the nature of marketing information, the following sections will give a detailed analysis of a marketing information system and its relevance to the livestock industry in general and the smallholder livestock producer in particular.

3.4 MARKETING INFORMATION SYSTEMS (MIS)

3.4.1 DEFINITION OF A MIS

Armstrong and Kotler (2006: 73-75) describe the MIS as consisting of people equipment and procedures to gather, sort, analyse, evaluate

and distribute needed, timely and accurate information to marketing decision-makers.

Perrault and McCarthy (2002:218) define a MIS as an organised way of continually gathering, accessing and analysing information that marketing managers need to make decisions.

A marketing information system (MIS) can also be defined as a system in which marketing information is formally gathered, stored, analysed and distributed to managers in accord with their informational needs on a regular planned basis, Jobber (2004:89). The system is built on the basis of information needs of marketing management, and supplies that information when and where required.

The following figure explains the marketing information system:

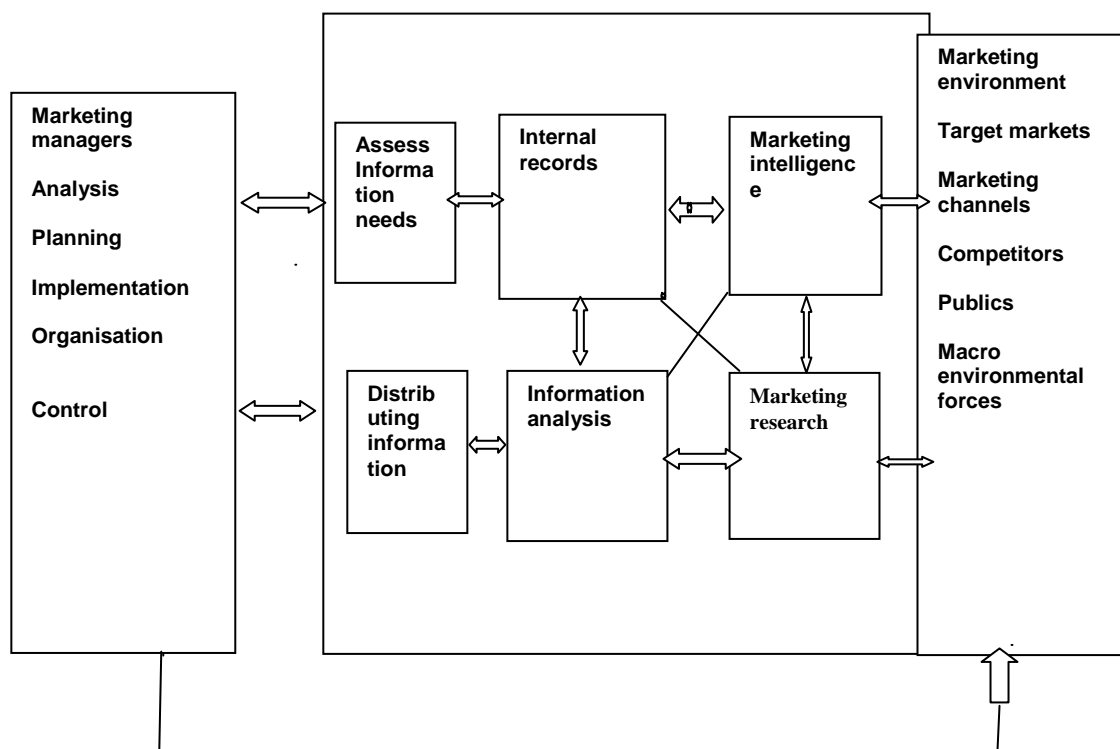


Figure 3.2: The marketing information system (Source Armstrong and Kotler.)

Based on the above diagram, Armstrong and Kotler (*op cit*) mention that the MIS begins and ends with marketing managers. First, it

interacts with these managers to assess information needs. Next, it develops needed information from internal organisational records, marketing intelligence activities and marketing research. The information analyst processes the information to make it more useful. Finally, the MIS distributes information to managers in the right form at the right time to help them make better marketing decisions.

In Chapter 2 it was mentioned that deregulation and the introduction of the Marketing of Agricultural Products Act of 1996 resulted in most agricultural industries reorganising themselves into commodity associations to address common issues. One of the key issues to be addressed was organising market-related information to assist marketing decision-making by its members.

Armstrong and Kotler (2004:142) argue that increasingly, marketers view information not only as input for making better decisions but also as an important strategic asset and marketing tool. A company's information may prove to be its chief competitive advantage. Competitors can copy each other's equipment, products, procedures, but they cannot duplicate the company's information and intellectual capital.

Armstrong and Kotler (2004: 142) also mention that in today's more rapidly changing environments, managers need up to date information to make timely, high quality decisions.

Armstrong and Kotler (2004:143) further argue that with the recent explosion of information technologies companies now can generate information in greater quantities. Despite this data overload, marketing managers frequently complain that they lack information of the right kind. An effective MIS starts by determining the objective of the information, by identifying decision needs that require certain information.

In the South African livestock industry for example, SAMIC, and RMAA, the latter being a representative forum for abattoir owners in South Africa, compile a marketing information and a price information system respectively, on a continuous basis. SAMIC, an umbrella association of livestock distribution chain industries was, amongst others, responsible for the provision of information on livestock classes, monitoring of livestock price trends and in the promotion of a positive image of South African red meat locally and internationally. (Ntshephe (2007.)

RMAA on the other hand collects weekly prices from member abattoirs to redistribute to subscribers and members. This information assists sellers to decide when and where to sell livestock, after price considerations have been made.

The next important aspects that will be examined are the components of the MIS. The following figure depicts the components of a MIS:

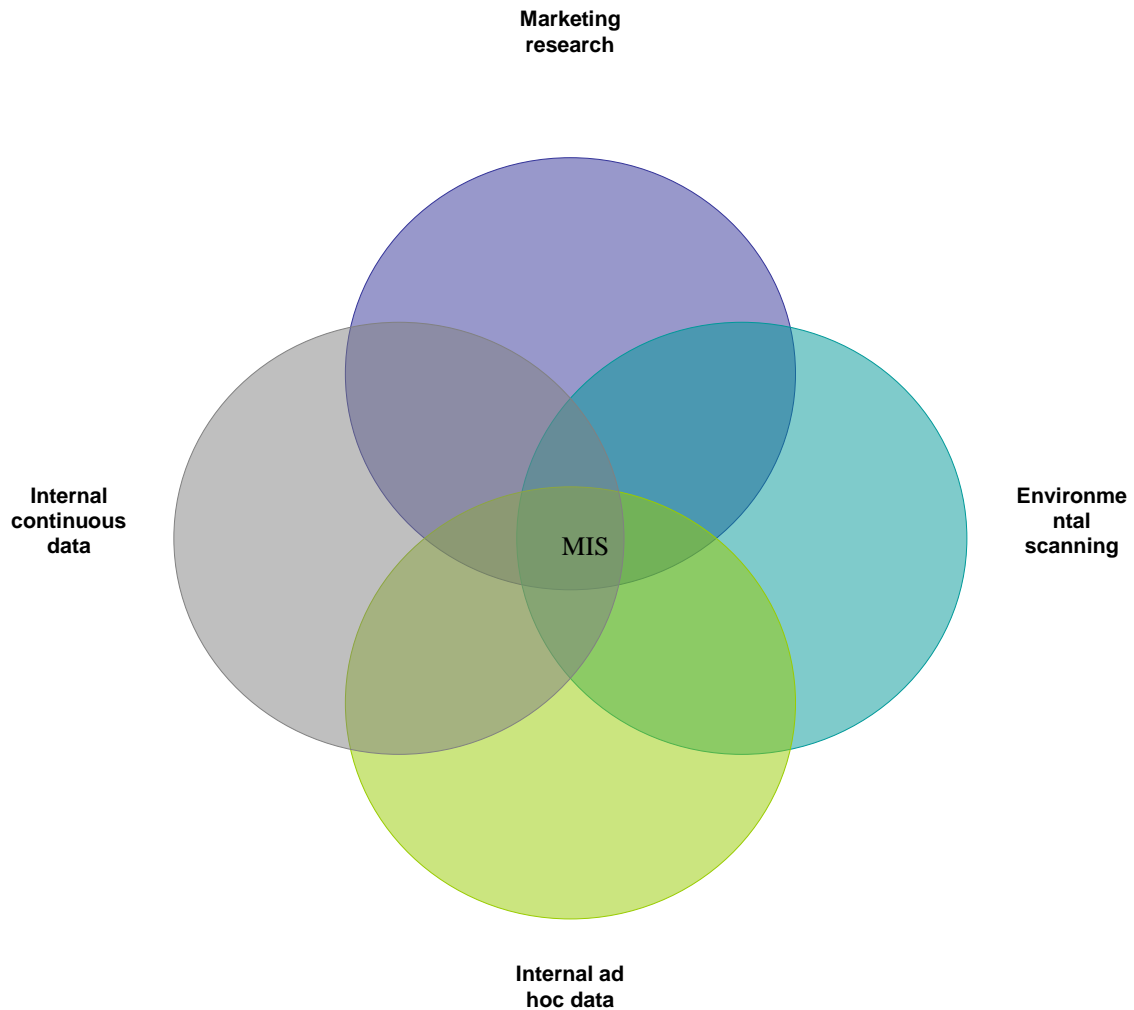


Figure 3.3 Components of the MIS.

3.4.2 COMPONENTS OF THE MIS

Based on the above diagram, Jobber (2004: 90) explains that the MIS comprises of four elements which are the:

- Internal continuous data

Companies possess an enormous amount of marketing and financial data that may never be used for marketing decision-making unless organised by means of an MIS. One advantage of

setting up an MIS is the conversion of financial data into a form usable by marketing management.

In the livestock industry, for example, the RMAA initiated the development of a price information system with a database of historical and current prices, to create and maintain an information system containing relevant and historical data essential for planning. All participating abattoirs are required to send their prices on a weekly basis. Prices are analysed, a report is thereafter compiled, which will be distributed to all participants and other interested parties via fax or electronic mail. This price information assists livestock farmers, to for example, take informed decisions on whether or not to sell their livestock and how much to expect for selling their livestock to a particular abattoir.

- Internal *ad hoc* data

Organisational data can also be used for specific (*ad hoc*) purposes. Capturing the data on the MIS allows specific analysis to be conducted when needed. A good example would be the weekly meat prices collected by the RMAA. The RMAA then disseminates this weekly to its members to assist in future marketing decisions.

- Environmental scanning

Industry growth, challenges and opportunities need to be scanned and monitored. In addition competition and competitive trends also need to be observed on an ongoing basis. Until recently, SAMIC used to assist in disseminating local and international market-related information through publications in its website www.samic.co.za.

- Marketing Research

Whereas environmental scanning focuses on the longer term, marketing research considers the more immediate situation. It is primarily concerned with the provision of information about markets and the reaction of these to various product, price, distribution and promotion decisions. As such, it is very important as it makes a major contribution to marketing mix planning.

Successful marketing strategies require information about potential target markets and their likely responses to marketing mixes as well as about competition and other marketing environment variables. Marketing managers need information for implementation and control. Without good information managers are left to guess and in today's fast changing markets, that invites failure. Access to good marketing information could be of great help to the smallholder farming community.

The kind of research that was conducted in the past focused on highlighting the need to make marketing information available. Chapters 1 and 2 give details on this research. No research was conducted before on the detail of required market information. This research therefore, focuses on the detail of this marketing information, in line with elements of the marketing strategy. Furthermore, results emanating from this research will be packaged and posted as a source of information to assist livestock farmers, especially the new in the development of their marketing strategies.

Perrault and McCarthy (2002:99) argue that marketing managers face difficult decisions in selecting target markets and managing marketing mixes. Both large and small firms are setting up MIS's to be certain that routinely needed data is available and quickly accessible.

Perrault and McCarthy (2002:100) indicate that it is essential for any organisation regardless of its size and type to devise and employ some form of MIS to aid decision-making. Perrault and McCarthy (*op.cit.*) mention that what this means is that an organisation should engage in the following activities:

- aggressively amassing data
- analysing data and preparing appropriate reports
- disseminating the collected and analysed data for the proper marketing decision-making sections in the organisation
- storing data for future use and comparisons
- seeking out relevant data that have either current or future marketing ramifications.

As mentioned earlier, through organisations such as RMAA, SAMIC, Mohair South Africa and others, this kind of information is disseminated to the users on a regular basis.

The next section will focus on the advantages of the MIS.

3.4.3 ADVANTAGES OF THE MIS

Evans and Berman (2001:131) further discuss the advantages of the MIS depicted in the following diagram.

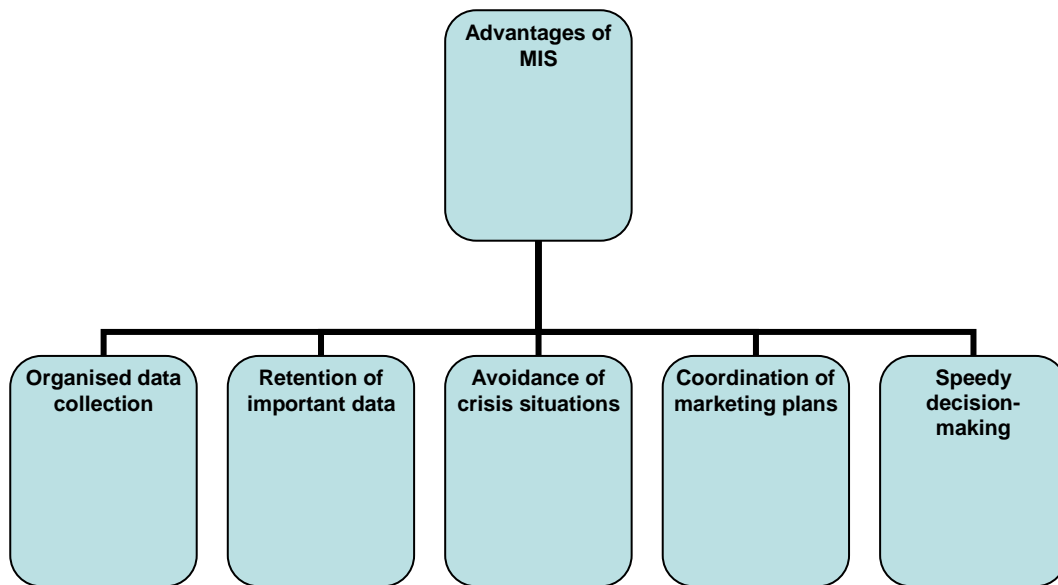


Figure 3.4: Advantages of the Marketing information system.

These advantages are:

- organised data collection

Ideally, it is always wise to collect information that is likely to be used on an on-going basis. For example, the South African Abattoir Association collects weekly information on meat prices on each abattoir and circulates the information to abattoir members for information. Abattoir members then get to know what prices are prevailing in the market at a certain time. A marketing Information System can be instructed to collect data from various data sources at certain time intervals.

- retention of important data

Normally, price information is retained to establish price trends of a particular agricultural commodity. In the livestock industry for example, price differences and trends can be traced for the different grades of livestock sold in the red meat market. For example, SAMIC collected monthly retail prices for meat and published that in its website www.samic.co.za,

SAFA publishes monthly carcass purchases and sales. The Statistics section of the Department of Agriculture, Forestry and Fisheries publishes average monthly producer prices on a yearly basis. This information helps livestock producers get an idea on the prices charged and acceptable in a certain market, be it a retail, feedlot or abattoir. All this is made possible when there is a marketing information system that can retain and retrieve information.

- avoidance of crisis situations

Market information, especially price information will assist the marketer to take decisions on how much to charge and where to sell the product. By merely understanding the target market, the marketer will be in a position to develop a marketing offering or programme beforehand to avoid a crisis situation. By retrieving the relevant information from the marketing information system, crisis situation can be avoided.

- coordination of marketing plans

Once the marketer has access to market information regarding the kind of product needed by the target market, price, distribution channels, etc. it facilitates the process of the development of a marketing strategy or plan. Once that is done, it becomes easier to then implement the strategy or plan and monitor performance.

- speedy decision-making

Having access to ready marketing information through a system, enables the user to take speedy decisions as and when needed.

For example, by comparing prevailing abattoir prices, a livestock farmer can speedily decide where to sell livestock within a certain time period. It is also important for the information to be made consistently available in the system. It is also equally important that the information made available in a marketing information system is reliable and can also be verified.

In addition, the FAO, (2003) further explain advantages associated with the MIS as follows:

- deciding where to sell

It is important that the farmer should be able to sell his or her produce at a convenient place. In the livestock market, farmers have several options they can sell directly to consumers in the locality, sell at farm gate to traders or speculators, take or consign animals to an auction or sell to processors such as abattoirs.

- checking on the prices

Checking prices is particularly important for farmers who send their produce on consignment. Farmers have no advance knowledge of the prices they will receive and depend on their agents to get the best prices for them. These arrangements require that the farmers trust their agents to get the best price possible. Even where such trust exists, however, it is still useful if farmers can compare the prices they receive with the reported market prices. Checking on prices is also important when farmers sell by auction. They need to establish whether the animals are getting better than the average prices, the same or worse.

- deciding whether or not to store

Farmers producing grain crops such as maize or crops such as onions, potatoes and apples are able to store them in expectation of higher prices later. Where market information about seasonal price trends is available to farmers, they can get an idea about seasonal price pattern of prices

- deciding whether to grow different crop

Deregulation may mean that those farmers living in areas where marketing cost are high find that the returns of some products no longer justify the costs. Such farmers need to be able to calculate whether growing other crops may be more profitable. Information on past market prices is essential for them to make such decisions.

Having discussed the nature and importance of marketing information systems, the next discussion will now focus on livestock marketing systems in South Africa, its shortcomings and an ideal livestock marketing information system that should be put in place. Recommendations to overcome these shortcomings will also be made.

3.5 LIVESTOCK MARKETING INFORMATION SYSTEMS IN SOUTH AFRICA

Since deregulation, a few organisations took the initiative of developing commodity-based livestock marketing information systems for the benefit of its membership. The overall intention was to fill in the information gap that was created when the Meat Board was abolished. Key marketing information systems prevalent in the livestock industry are the following:

3.5.1

RMAA PRICE INFORMATION SYSTEM

RMAA initiated the development of the price information system with a database of historical and current price, to create and maintain an information system containing relevant and historical data essential for planning and development purposes. The primary objective is to timeously release accurate and valid information at an acceptable cost. The price information report is released once a week. All participants are required to send their prices on a weekly basis to the RMAA before 12:00 on a Monday afternoon. All price information is handled in a confidential manner and may not be used for any purposes other than the price information.

RMAA performs the function of sorting, analysing, evaluation and distribution of timely and accurate price information to farmers, to facilitate decisions on when and where to sell their animals.

Prices are analysed and a report compiled, which is distributed to all participants via fax or electronic mail. This price information is just as relevant to the smallholder sector as it gives out information on the weekly prices on the various grades purchased by and sold to merchants. Smallholder farmers, just like other livestock farmers need the information to take informed decisions on whether or not to sell and how much to expect from the sale of their livestock in certain periods. This system has been adopted by the smallholder sector as well. In most provinces, extension staff liaises with SAFA on behalf of smallholder farmers to access this information. The system needs to be intensively marketed in the sector. Efforts to educate the smallholder livestock farmers on abattoir market requirements need to be accelerated.

3.5.2 SAMIC MARKET INFORMATION SYSTEM

Until very recently, SAMIC's key and specific objective was to promote long-term competitiveness of the red meat industry, this is what set the organisation apart. SAMIC also acted to lobby government and other major stakeholders on issues that affect the red meat industry. The organisation supplied historical price information on imports and exports, auction prices, weekly prices and trends both locally and internationally. More important information on how livestock is graded is available in the organisation. SAMIC was appointed by the Department of Agriculture to oversee the setting of grading standards for the livestock industry, this important function has been retained though the organisation has restructured.

3.5.3 CAPE WOOLS PRICE INFORMATION SYSTEM

The Cape Wools website provides up-to-date wool auction information through its website: www.capewools.co.za.

3.5.4 MOHAIR SA PRICE INFORMATION SYSTEM

Mohair SA likewise provides information on sales on an auction-on auction basis.

3.5.5 PRIVATE ORGANISATIONS, TRADERS AND PROCESSORS

Weekly livestock price information and trends appears in the Farmers Weekly, a weekly farmers' publication, is supplied by the First National Bank and also appears in the bank's website.

Agrimark Trends (Pty) Ltd is a South African based company that specializes in the analysis of the Southern African industry focusing on

providing timely market information and trends. Most of the information is provided for a fee.

Livestock traders and processors are an important channel and source of marketing information for the smallholder livestock farmer. A few traders located in the survey area will be interviewed.

The major challenge on livestock marketing information is that is thinly spread on a number of sources. This is why the Department of Agriculture is in the process of consolidating all this livestock market-related information into one system to enable users to have access to all relevant information from one source. The source is linked to abattoirs and feedlot websites that provide price information. More livestock - related information will be stored and updated on an ongoing basis, based on demand. This web based information system will be complimented by the cell phone technology to enhance dissemination of the same information to those who do not have access to the Internet.

3.6 AN IDEAL LIVESTOCK MARKETING INFORMATION SYSTEM

On a practical level, much as the livestock marketing information is in the public domain, the information is scattered amongst various sources. for example, SAMIC is the recognised national source of standards and grading livestock information. Weekly livestock prices are published by the Farmer's Weekly though the courtesy of the First National Bank. Commodity associations such as Mohair South Africa have their own price information system, a similar situation applies with the (SAFA), the Abattoir Association and so forth.

Information on the various channels of distribution within the livestock industry lies with the channel members such as the Feedlot Association, producer organisations, and other channel members.

Promotional efforts to encourage more utilisation of livestock as a source of protein is being handled by different organisations, SAMIC being in the forefront in this regard.

There is not one source of livestock market related information that provides all the information. For a newcomer, it becomes very difficult to consolidate all these pieces of information from a myriad of sources such that a cohesive strategy is developed. The real challenge, especially for the benefit of the smallholder farmer is to ensure that all this relevant information is packaged logically together for optimal use.

An ideal livestock marketing information system should have the following information as depicted by the figure below: Current gaps in the South African livestock information systems will be highlighted in the analysis of this ideal livestock marketing information system model. General recommendations on how these gaps can be filled after each and every element of an ideal livestock marketing information system. Below is a model depicting an ideal livestock marketing information system:

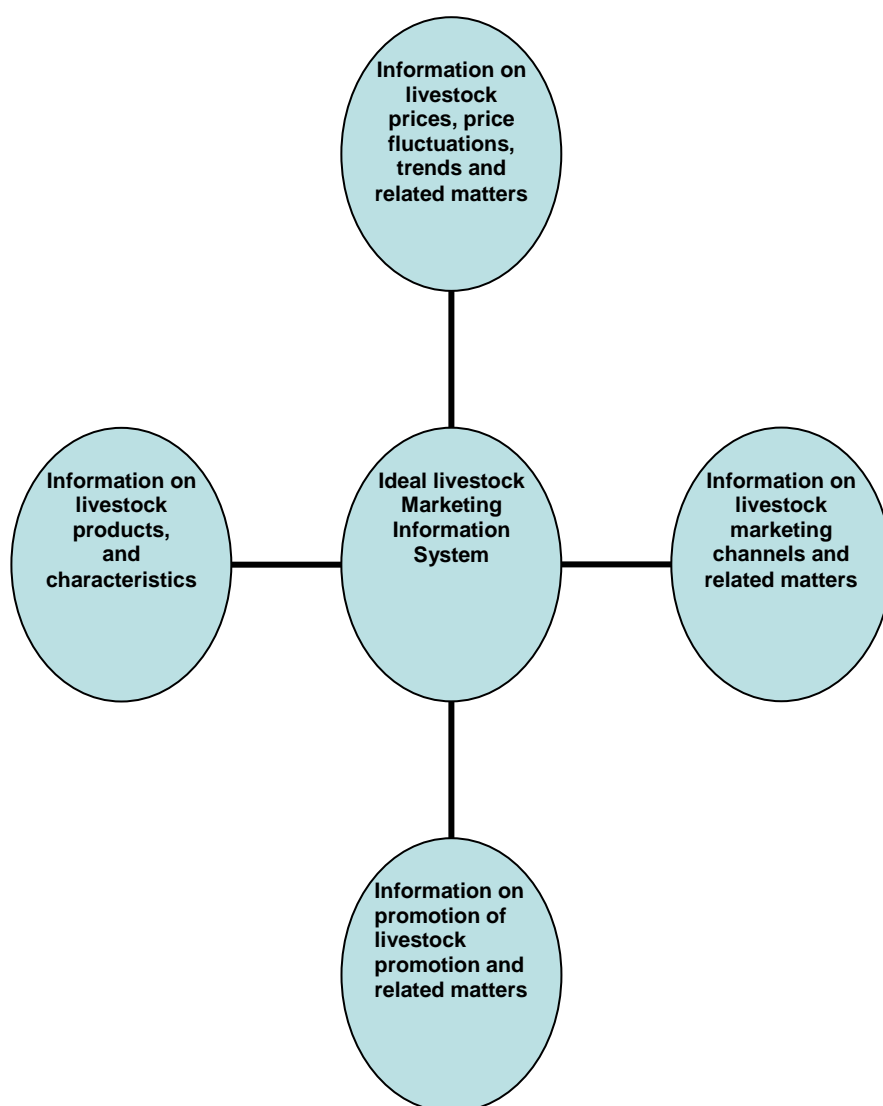


Figure: 3.5 An ideal livestock marketing information system: (Developed by author).

The following section will make a detailed analysis of information needed in each of the components of an ideal livestock marketing information system. Existing gaps will be highlighted, recommendations on how to fill in the gaps will be made after the analysis of each of the 4Ps that constitute the system.

3.6.1 INFORMATION ON THE LIVESTOCK PRODUCTS AND CHARACTERISTICS

In order to promote, facilitate and perform marketing effectively, the requirements with which products must comply are normally laid down by means of pre-established specifications.

Manufactured products are standardised, while most agricultural products cannot be produced strictly according to specifications, hence they are classified. The Agricultural Products Act (Act 119 of 1990) and the Meat Safety Act of 2000 (Act 40 of 2000) provide measures to maintain essential national quality standards and promote meat safety respectively.

The main purpose of the Agricultural Products Act is to divide a heterogeneous product like livestock into homogeneous 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
- to form the basis of marketing communication
- to ensure that a safe product is made available to the consumer in orderly fashion.

There are product related characteristics that a livestock buyer needs to verify before purchasing livestock. These are the following:

3.6.1.1 AGE

Age plays an important role in the choice to buy an animal. Meat of young animals is most tender and therefore more popular amongst consumers. To determine how old the animal is, one looks at the number of permanent teeth. In South Africa, livestock is classified according to the following codes:

AAA = This code means that the colour of the roller mark on the carcass is **PURPLE** and is an indication that the meat is from a young animal (no permanent incisors) and thus the most tender meat. The animal is under 1 years of age

ABAB = This code means that the colour of the roller mark on the carcass is **GREEN** and is an indication that the meat is from a young animal in transition to an adult animal (1 - 2 permanent incisors) and thus tender meat. The animal is 1-1.5 years old

BBB = This code means that the colour of the roller mark on the carcass is **BROWN** and is an indication that the meat is from an adult animal (3 - 6 permanent incisors) and thus less tender but with a lot of flavour. The animal is 2 years old

CCC = This code means that the colour of the roller mark on the carcass is RED and is an indication that the meat is from an adult animal (>6 permanent incisors) and thus the least tender. The animal is 2.5 – 3 years old and more

Age determination forms the basis of the classification system and price formation in the industry.

The following diagram illustrates how livestock is classified by inspecting teeth:

Permanent Snytande Permanent Incisors

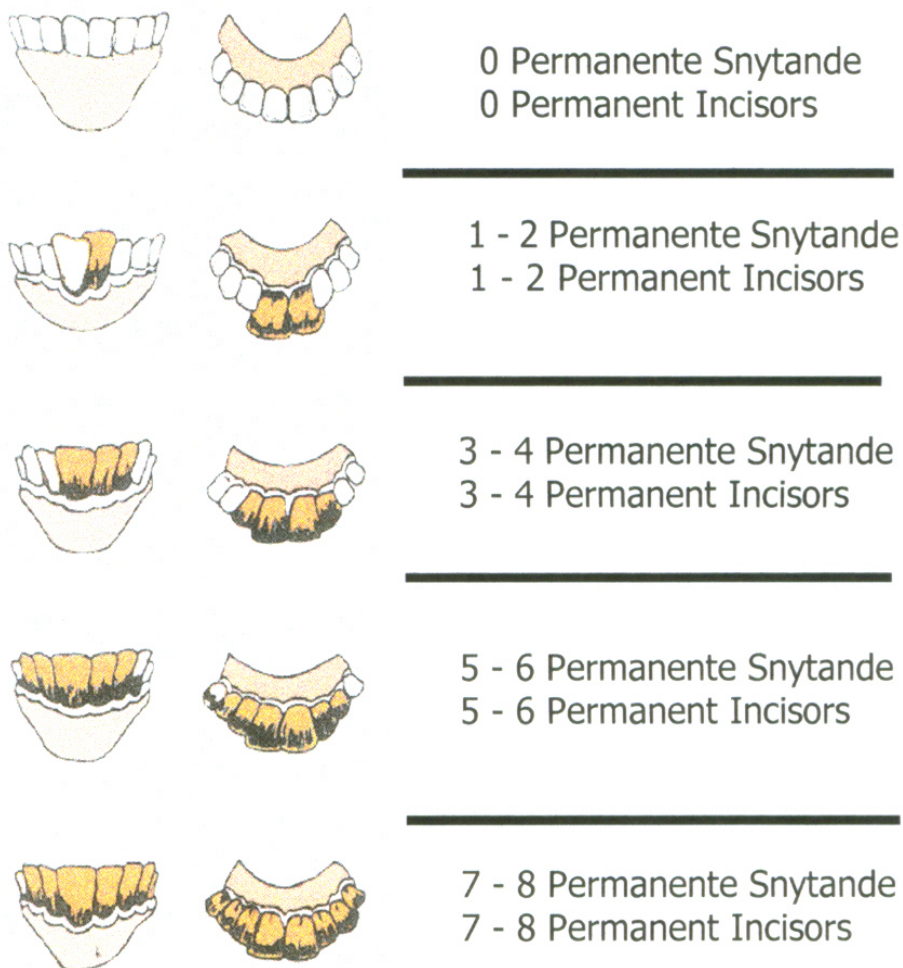


Figure 3:6 Age classification of livestock.

The information gap that exists is that a few smallholder livestock farmers know how to use this tool to determine the age of their livestock. In most instances, smallholder farmers associate age and quality incorrectly. They think the older and bigger the animal, the higher the price it will fetch. It then becomes a problem when buyers of livestock show great reluctance to pay higher prices for inferior livestock.

A possible recommendation here is to continuously expose smallholder farmers to these market requirements by having buyers of livestock sharing the information. From the Directorate's side, efforts in partnership with the provincial departments of agriculture are being made to have these exposure visits to form part of capacity building programme for smallholder farmers.

Another challenge is to ensure that local languages are also used by buyers and facilitators to ensure that the smallholder sector does understand the importance of meeting this very important market requirement. It is amazing how many white people, especially from the farming community, are able to fluently speak black languages in South Africa, so it seems that language is not a serious problem.

3.6.1.2 FATNESS

Decisions on the fatness of beef, mutton/lamb or goat carcasses are done by visually observing how much fat is on the carcass. Usually carcasses that have more fat are juicier and have more flavour to the meat than very thin or lean carcasses. The carcass is divided into a hindquarter middle section and forequarter.

When an animal has very little fat or no fat the meat is called very lean and falls under code 1 or 2.

When an animal is not too lean or not too fat the meat falls under the codes 2, 3 and 4. This is what the consumer prefers.

As soon as the animal carcass carries too much fat, the meat will be classified under code 5 slightly over fat and code 6 excessively fat. These codes are normally used for classification by abattoirs. The following charts illustrate the various fat codes used in the livestock industry:

Figure 3.7:Beef: Fat code 1



Figure 3.8: Beef: Fat code 2



Figure 3.9: Beef: Fat code 3



Figure 3.10: Beef: Fat code 4



Figure 3.11: Beef: Fat code 5



Figure 3.12: Beef: Fat code 6



Again, the smallholder livestock farmer does not have an idea on how to classify the animal according to its fatness. It is important for these farmers to understand that the consumer prefers fat codes 2, 3 and 4, codes 5 and 6 are not acceptable as they carry too much fat.

Though nothing much has been done on the ground in this aspect, learning more about grading of animals according to fatness forms part of the need for exposure visits organised for farmers. It should be noted that this is an ongoing process and needs cooperation and support by the buyers of livestock.

3.6.1.3 CONFIRMATION

Confirmation is the way the carcass looks and describes the ratio between meat and bone. This is very important when one selects animals for the marketing, for example, to supply the right size of retail cuts. Therefore, the customer prefers to buy cuts of code 3 to 5. The following codes are used to assess confirmation of livestock:

Code 1: Very flat

Code 2: Flat

Code 3: Medium

Code 4 Round

Code 5: Very round

Learning more about grading of animals according confirmation forms part of exposure visits organised for farmers. It should be noted that this is an ongoing process and needs cooperation and support by the buyers of livestock.

3.6.1.4 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.

Smallholder livestock farmers need to know about this and the advantage of castrating animals to fetch higher prices.

3.6.1.5 DAMAGE

When cattle are bruised during handling or transport the producer can lose a lot of money. How much damage will depend on the location and depth of the injury. If cattle are bruised, it will have an effect on price when being sold. For example if the fat to meat to bone balances 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.

This is a huge challenge for smallholder farmers, most sell their livestock damaged because of inadequate transport and lack of knowledge on how to transport animal in a safe and humane manner.

3.6.1.6 STATE OF HEALTH

Sick animals should not be marketed. The carcass of a sick animal is normally condemned and destroyed. Again this poses as a huge challenge for smallholder farmers. However, government has made inroads in this area in educating new farmers on animal health. This

momentum needs to be maintained to ensure meaningful participation by these farmers in mainstream marketing activities.

3.6.2 PRICE-RELATED INFORMATION

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 by auction and prices were derived directly from these markets.

Currently, price formation is determined by marketing forces based on demand and supply. If the supply is higher than demand, the producer price will decrease and vice versa. Hence prices fluctuate on a daily basis. Availability and price of maize, climate rain, drought or fodder flows, the economy of the country and imports of red meat are all factors that affect the price of meat.

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

Tables 3.1 and 3.2 demonstrate the relationship between price and class for cattle (beef) and small stock (sheep and goats) respectively. The younger the animal, the higher the price. Also carcasses are more expensive than live animals due to the value added to the animal. Prices of animals on the hoof (live animals), for some reason, are no longer made available.

There are calls especially from smallholder livestock farmers and their representative organisations, such as NERPO that these prices of live animals be made available to facilitate decision-making by the smallholder sector.

Beef prices expressed in cents per kilogramme								
Year	Class A		Class AB		Class B		Class 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

Table 3.1 Average prices paid for the beef carcasses and live animals from 1998-2000 (FAO 2003.)

Small stock: prices in cents per kilogramme								
Year	Class A		Class AB		Class B		Class 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	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

Table 3.2 Average prices paid for sheep and goats and live animals from 1998-2000 (FAO 2003.)

There is sufficient evidence that this kind of information is critical for the smallholder sector as this sector usually sells livestock on the hoof. At the moment, there is no source of information to assist smallholder farmers on pricing of animals on the hoof. This part of the information needs to be incorporated in the overall system as a matter of urgency.

RMAA publishes weekly slaughter price information for cattle, lamb and sheep. For an example the following tables, Table 3.3 and 3.4 illustrate some of price information published by the organisation:

Cattle	Units	Average mass	Avg. selling price	Selling Min	Selling Max
A	5477	228.2	22.65	21.55	31.50
AB	168	252.8	22.50	21.04	24.00
B	248	259.1	18.99	16.00	22.50
C	461	246.2	17.44	16.72	18.50

Table 3.3 Average prices from 11/02/2008-17/02/2008 – cattle (RMAA 2008.)

Sheep	Units	Average mass	Average. selling price	Selling Min	Selling Max
A	670	13.7	28.82	26.12	31.26
AB	179	18.5	24.11	23.44	28.00
B	96	21.7	21.62	21.72	27.45
C	1277	21.9	21.33	20.00	23.74

Table 3.4 Average prices from 11/02/2008 – 17/02/2008 – sheep (RMAA 2008.)

3.6.3 INFORMATION ON LIVESTOCK DISTRIBUTION CHANNELS AND RELATED ISSUES

Information on livestock distribution channels forms an integral part of the livestock marketing information system because farmers need to know which channels they should use to make livestock available at the right place, to the right target market at the right time.

In the livestock marketing sector, relevant examples in the selection of target markets are:

- commercial goat producers in Southern Namibia identified niche marketing in Kwa Zulu Natal because of the Indian community which has a high demand and preference for goat meat
- commercial goat and sheep farmers of the Little Karoo have identified an opportunity for grade C animals in the black communities of the former Ciskei and Transkei during summer holidays. The demand for goat and sheep is usually extremely high during this period of the year.

The discussion that follows focuses on the detailed information on the various distribution channels in the livestock industry. Every farmer who markets livestock needs to have information of the characteristics of each distribution channel. The figure below demonstrates the major channels of distribution at the disposal of the livestock producer.

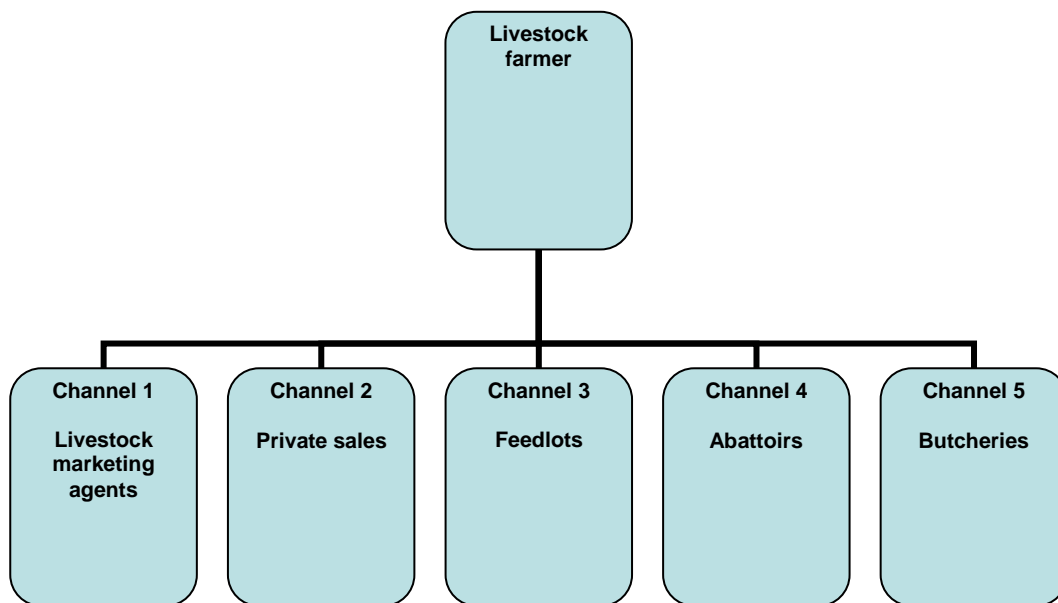


Figure: 3.13: Major channels of distribution for the livestock industry. Source: By author.

The character of each distribution will be discussed below:

Channel 1: Livestock marketing agents

Livestock auctions are traditionally collection points where large numbers of animals (cattle, sheep, horses etc.) are bought and sold. Livestock marketing auctioneers render a service of bringing together a buyer and seller, without owning the livestock, but assist in the transfer of ownership from producer to buyer. Their activities include arranging live auctions at regular times at strategic points. Livestock producers bring livestock to auction pens where transactions take place. Auctions are arranged by livestock auction agents on a commission basis. Auctions play an important role in livestock marketing, and they are the principal sales outlets for live animals and are therefore quite popular with the smallholder sector. Sales of animals are done on the hoof (i.e. sold live).

The basic functions of an auctioneer are:

- to advise buyers and sellers in the auction

- to ensure that an auction takes place, and runs smoothly
- to classify the stock on the hoof according to classification
- to promote the attendance of buyers at respective auction pens
- to duly mark the stock that has been sold
- to organise labour with selecting and heading off of cattle
- to apply the laws governing the selling of live animals at auctions.

Secondly, there are a number of speculators active in the marketing of livestock in South Africa. Contrary to auctioneers, livestock speculators take ownership and in return resell the animals at a profit. Livestock farmers in this instance have an advantage of not incurring transport costs as these costs are incurred by the speculator. There is no commission involved as prices are reached through negotiation.

Speculators are usually perceived to be dishonest. 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 though not satisfied with the price paid. Speculators are important role players in the smallholder livestock market as they normally buy livestock to resell to buyers such as feedlots and abattoirs. They do monopolise this market as there is no formal institutional infrastructure to service the smallholder sector, especially in the former homelands and rural areas in South Africa. In most instances, they are in a position to dictate prices as it is not every buyer who is willing to go through to rural because of the bad road infrastructure and crime.

Though they are very few speculators in each region, they understand at first hand, challenges that confront smallholder livestock farmers in the marketing of their livestock. There is an intention in this study to discuss issues with the speculators, as they play an important role in linking smallholder farmers with mainstream marketing activities.

Channel 2: Private sales

In the developing areas, private sales are an important marketing channel. A private sale is a broad concept which in the case of livestock marketing can comprehensively be viewed as a non-institutionalised activity involved in the buying and selling of various forms of livestock from local farmers. Private sales also include individuals buying livestock for different reasons.

Informal buyers will be interviewed just to get their impression on the quality of livestock and prices paid. Informal buyers will also make suggestions on how smallholder livestock farmers can make more money from their livestock, or even improve market penetration.

It is difficult to quantify private sales as it takes several forms. Livestock is bought either for slaughter or for investment. Livestock is bought for social functions, like funerals, customary celebrations, weddings and religious celebrations. Private buying is important to farmers as they are in the position to determine the prices for their animals. Private sales are therefore the cheapest and probably also the simplest form of marketing. However, demand is irregular with high demand during certain times of the year, like festive seasons.

Channel 3: Feedlots

A feedlot is a confined area with watering and feeding facilities where livestock are hand-fed or mechanically fed to consistently produce quality meat. As animals are kept in pens, they are fed grain-based diets, hay or silage. This kind of livestock production is called the grain-fed beef production. Olivier (2004: 33).

Feedlots normally buy weaner calves with a live mass of 230 kilogrammes at an age of 205 days and add about mass of about 105 kilogrammes through intensive feeding for about 100 days. The ultimate dressed carcass weight will be about 215 kilogrammes. Classification of livestock handled by feedlots is 95% Grade A animals and approximately 5% AB grades. The benefits of grain feeding in a feedlot with controlled quality and amounts of food are that cattle produce beef with uniform carcass fat content and colour. Olivier (2004:33-34)

There are currently about 60 commercial cattle feedlots and ten 10 sheep/lamb feedlots registered under the South African Feedlot Association (SAFA). These feedlots market their animals throughout the year, have a total standing capacity of about 420 000 animals with a throughput of 1 533 000 heads per annum.

Following the deregulation of the South African meat industry in the 1990's, a number of larger feedlots have now vertically integrated into processing, wholesaling and even retailing their own quality beef products.

According to Olivier (2004: 34) the feedlot industry is characterized by the following three types:

- commercial feeders that normally operate a major feedlot-farming enterprise that is within the marketing for twelve months

of the year. The operation is highly scientific and intensive. A permanent market for all beef produce exists

- seasonal feeders will take their own weaner calves and feed them. They will normally use own grain or will buy it and generally market weaners as the marketing dictates
- farmer feeders establish a local beef off-take at the butcher or abattoir and have access to reasonably inexpensive feed ingredients. They run the feedlot in conjunction with other farming enterprises and normally feed their own calves. They can enter or exit the marketing when it suits them, depending on beef prices and the possibility of higher profits.

The following table explains the South African feedlot categories:

Category	Standing capacity head of animals
Farmer feeder	Up to 3 000 head
Small	4 000 -8000 head
Medium	9 000-12 000 head
Large	12 000 – 20 000 head
Extra large	20 000-30 000 head
Ultra large	Over 30 000 head

Table 3.5: South African Feedlot Categories Source Olivier (2004: 35).

According to Olivier (2004: 36) at present, there are 70 feedlots in South Africa. These feedlots account for approximately 70-80% of cattle in the feedlot industry. Set out below are the main players in the feedlot industry, their physical location and the standing capacity of animals at a specific time.

The following table explains main players in the feedlot industry:

Name	Location	Number of animals at a specific time (approximate)
Karan Beef	Heidelberg	70 000
Kolossus/Vleissentraal	Potchefstroom Magaliesburg	40 000
Chalmar beef	Bapsfontein	15 000
EAC Group	Sasolburg Harrismith Bethlehem	40 000
Sparta Beef	Marquard	40 000
Beefmaster	Christiana	30 000
Beefcor	Bronkhorstspuit	25 000
Crafcor	Cato Ridge	30 000
SIS	Bethal	22 000
Total		297 000

Table 3.6: Main Players in the feedlot industry Source: Olivier (2004: 36).

The majority of the feedlots are located in the grain producing areas or where the feedlots have access to grain by-products. This results in a decrease in transportation costs which lead to the decrease of operational input costs and thus improves profits on the bottom line. This could mean the difference between profit and loss in an industry with low margins.

Livestock producers have an option of selling their livestock directly to feedlots. South Africa has a well-established feedlot industry. Today the South African feedlot industry is a flourishing industry that produces approximately 75% of all beef produced. The survey will definitely include the feedlot industry.

Channel 4: Abattoirs

The abattoir industry is responsible for the conversion of livestock to meat. The process remains critical to ensure a safe and wholesome product to consumers. The Meat Safety Act, 2000 (Act 40 of 2000) addresses measures to promote the safety of meat and animal

products, and to establish and maintain essential national standards in respect of abattoirs.

A significant number of abattoirs are operated as private ventures. These abattoirs differ in size and are located all over the country. Since the deregulation of the South African meat industry, a rapid growth in the number of registered abattoirs was experienced, namely from 330 in 1993 to 560 in 1999. Total slaughter capacity at registered abattoirs currently is estimated at 16 500 units per day (one slaughter unit either equals one head of cattle, or 15 herd of sheep or goats). Since deregulation, the abattoir sector fulfills an integrated wholesale function by buying animals on the hoof and directly selling carcasses and meat cuts to the retail sector. As a major buyer, the South African Abattoir Association will be subject of the survey.

The role of the abattoir industry in the meat chain has changed dramatically over the last number of years due to the vertical integration and privatisation of the industry. Abattoirs are taking responsibility for the product once it is slaughtered with regards to quality and safety, and at the same time have to incur losses attributed to the poor quality of purchase livestock. The development of the meat industry is also such that abattoir owners are often more involved in the processing side of the product and this has placed an even more direct burden on the abattoir owner.

When livestock is ready for the marketing, the animals are transported from the producer (farmer) or feedlots to the abattoir. The animals must be transported in such a way that they are not injured, since this could cause bruising. Animals are under stress when they are transported. Because of this, they are kept before being slaughtered, in order to calm them down. During this period the veterinarian examines the animals for any diseases. The transportation of live cattle is governed by the transportation welfare codes, coordinated by the Livestock Welfare Coordinating Committee (LWCC).

Meat goes through many operations before it hangs dressed in cold stores. The animals are stunned before they are slaughtered and dressed. After slaughtering the carcass is suspended from an overhead rail for the dressing operation, in which the hide and internal organs are removed. Further along the line various trimming procedures are performed. By the time it reaches the end of the chain the carcass is dressed and ready for inspection, chilling and classification. Once the slaughtering and dressing are done, carcasses are inspected by the health inspectors to ensure that it is fit for human consumption.

Meat inspection should be seen as an integral part of the slaughter and production process and is not regarded as an end-product inspection. It consists of the following aspects:

- ante-mortem inspection
- primary (on the line) inspection
- secondary meat inspection of detained carcasses or organs, and
- laboratory analysis including screening procedures.

Therefore, a final decision about a carcass or part of one must be based on all the information obtained from these ante-mortem inspections, visual inspections, palpations, incisions, smells and laboratory analysis forthcoming from these procedures.

Only approved abattoirs participate in the voluntary classification system. After classification, meat traders buy the carcasses and sell them to the consumer in the meat marketing. Carcasses are roller marked according the Red Meat Classification System.

It is generally accepted that the status of the animal slaughtered, significantly influences the safety and quality of the product. The following control points are therefore built into the process to reduce these risks:

- assessment of transport used for animals to the abattoir
- ante-mortem inspection of livestock
- compulsory resting periods for slaughter stock
- measures to ensure the cleanliness of slaughter stock
- meat inspections
- slaughter process and control measures to reduce the possible contamination of meat with external skin/ hide surfaces
- routine and specific laboratory diagnostics to confirm disease conditions or residues, and
- chilling, further states that by analyzing the hazards, the risks can be addressed by determining severity, incidence and onset.

Once the carcass passes final inspection and washing it is ready for chilling, highlighting the importance of temperature control and the procedures that ensure the safe storage of meat. The main reason for chilling meat is to control the proliferation of bacteria and other microbes such as yeast and moulds. In this way, shelf life is lengthened by slowing the multiplication of organisms which cause meat to spoil and microbes which cause food poisoning. Other reasons for chilling meat are to reduce the rate of harmful chemical changes such as rancidity of fats, and to improve handling qualities. The number of

microbes found on the surface of the meat immediately following slaughtering will depend on how hygienically the work in the abattoir has been done. Bone taint is a condition that is restricted to the deep muscle tissues of heavy or excessively fat carcasses where cooling takes place very slowly. It is most frequently found among animals which have been under stress, and generally occurs in the vicinity of the hip joint or sometimes in the shoulder of cattle. As long as meat is stored at less than 10°C (grades of Celsius) it will not readily cause food poisoning, though it may well undergo bacterial spoilage.

Chilling is used for short-term storage, while freezing is used for long-term preservation of meat. Freezing therefore extends the shelf life from weeks to months. Below -12°C bacterial growth ceases, so the shelf life of the meat is limited only by the actions of enzymes which cause fat to become rancid. The maximum shelf life at -18°C is: eight months for mutton, and ten months for beef.

Some of the key abattoirs in the industry include Balfour, Cato Ridge, Bull Brand, Maitland's, Pyramid, Chalmar Beef, Brits, Kimberley, LAW, East London, Strydenburg, Upington, Vereeniging, Vryheid, Port Elizabeth and Witbank. Olivier (2004:45).

Processing plants or meat manufacturers consist generally of two types of production cycles, the canned meat production cycle and/or the fresh meat production cycle. Processors/manufacturers are a logical extension of the modern abattoir operations.

Processing areas and equipment are regularly monitored by quality controllers to ensure that all hygiene standards are met. The whole manufacturing process takes place under the watchful eye of the South African Bureau of Standards (SABS). Once released by SABS, the products are labelled, shrink-wrapped and palletised.

In the meat production cycle, chilled meat is sold, as half or quarter carcasses or in smaller pieces called primals. Deboning is the term used in the industry to process carcasses into smaller primal cuts. Deboning plants are kept at a constant temperature of 8 degrees Celsius to ensure that the cold chain is maintained at all times. A well-maintained Hazard Analysis of Critical Control Point (HACCP) system and goods manufacturing procedure guarantee quality and safety.

The abattoir industry will definitely be included in the survey.

Channel 5: Butchers

Another available option to farmers is to sell their livestock directly to butchers, which also play an important part of marketing of cattle in developing regions. Though their market share and role cannot be quantified, they are a very important channel for the smallholder livestock farmer. One butchery owner was interviewed during the study. Butchers enhance the marketability by acting as buyers in their own right and by acting as buyers in auctions as well. 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.

3.7 CONCLUSION

The nature, role and importance of marketing information systems were examined. The relevance of marketing information systems in the present livestock marketing environment was highlighted.

It is very clear that smallholder farmers have a long way to go before they effectively participate in mainstream livestock markets. Access to livestock marketing information is not the only challenge that the smallholder livestock farmer has to deal with, but very key to effective participation.

The next chapter will focus on obtaining information from buyers of livestock on what they consider as key market requirements. The information requirements will serve as the basis in compiling the questionnaires that will be circulated to the buyers of livestock for inputs.

Once this information on market requirements is consolidated, another structured questionnaire will be developed and circulated to smallholder farmers who are mainly members of NERPO and also farmers, who sell their livestock on a continuous basis. Both questionnaires will cover aspects of market requirements including classification of livestock, distribution, prices determination and promotional issues. The questionnaire will also cover demographic issues including ethnic background, access to information and communication technology and relationships with key stakeholders. Other stakeholders, local extension officers and NERPO office bearers will be involved in this research. Out of this study discrepancies between what smallholder livestock know against what they should know will be highlighted.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 INTRODUCTION

This study intends to verify the level and extent of lack of knowledge of marketing related issues and constraints encountered in accessing marketing information by smallholder livestock farmers of the region of Moretele in the North West province. Research was undertaken to ascertain the knowledge levels of these farmers. This chapter intends to re-visit the primary and secondary objectives of the research, various research techniques will be reviewed, and the implementation of the research process will also be explained.

The objectives of the study are broken down into a primary objective and a number of secondary objectives. Stated below are the primary and secondary objectives of the research:

4.1.1 PRIMARY OBJECTIVE

This research intends to investigate the information needs of smallholder farmers in the Moretele area in the Bojanala Platinum District Municipality of the North West province.

4.1.2 SECONDARY OBJECTIVES ARE:

- to determine the demographic profile of the smallholder livestock farmer and their access to communication media
- to determine the quality of marketing information resources currently available to the smallholder farmer
- to determine the role of support institutions in facilitating marketing information for the smallholder livestock farmer

- to put forward recommendations that will enhance access to marketing information by smallholder livestock farmers in Moretele
- to identify further areas of research on the plight of smallholder farmers in South Africa.

4.2 RESEARCH METHODS

Before an explanation of the implementation of the research is made, it is important to explore some of the key research methodologies used in collecting data to provide background to the research process followed. Goddard and Melville (2001:8), mention that there are various types of research methods, the following are the most common:

4.2.1 EXPERIMENTAL RESEARCH

The cornerstone of natural sciences is experimental research. Experimental research is primarily concerned with cause and effect. Researchers identify the variables of interest and try to determine if changes in one variable result in changes in another. Experimental research deals with cause and effect dynamics within a closed system of controlled conditions. In most cases two situations are assessed. Each situation is assessed for comparability. Thereafter an extraneous dynamic is then introduced. An evaluation of each situation is then made. Whatever change is noticed is presumed to have been caused by the extraneous variable.

4.2.2 CREATIVE RESEARCH

Goddard and Melville (2001:8) further mention that creative research involves the development of new theories, new procedures and new inventions. For an example, an economist might develop a new model

of the world economic system. Creative research includes both practical and theoretical research. Practical creative research is about the design of physical things and the development of real world processes. Theoretical creative research is about the discovery or creation of new models, theories, etc. Practical research mainly proceeds by trial and error.

4.2.3 HISTORICAL RESEARCH

Historical research is often geared towards using past events to examine a current situation and to predict future situations (for an example stock market forecasting). The research does not directly study current causes or effects. Data is gathered from primary and secondary sources. A student of historical research needs to distinguish very carefully between two concepts that are frequently confused under the general rubric of “the study of history”. One of these concepts is genuine historical research, or historiography, which is the study and interpretation of history. It is with historiography that the historical researcher should be concerned with.

The other concept is chronology, which is simply the setting down of occurrences or events in the order of their happening. This does not imply that chronology does not fill a very important place in historical study. It does, as it is the grist of the research mill. It provides the first step in the process of data interpretation, which is the indispensable element of all research.

4.2.4 EXPOSITORY RESEARCH

Goddard and Melville (2001:10), mention that expository research is based purely on existing information, and normally results in “review” type reports. By reading widely on a field, and then comparing,

contrasting, analysing and synthesising all points of view on a particular subject, a researcher can often develop important new insights.

4.2.5 ACTION RESEARCH

Blaxter, Hughes and Tight (2001:67), classify action research as a complex, dynamic activity involving the best efforts of both members of communities and organisations, and professionals. They mention that this kind of research simultaneously involves the co-generation of information and analysis together with actions aimed at transforming the situation in democratic directions. Action research is an increasingly popular approach among small-scale researchers in the social sciences. Action research is also an important tool for those with wider concerns for social justice. It lends itself to the direct involvement and collaboration of those whom it is designed to benefit. Participatory action research is not designed and undertaken by research “experts” but by those community members who are involved in the issues that the research is addressing.

4.2.6 DESCRIPTIVE RESEARCH

Descriptive research is research in which a specific situation is studied either to see if it gives rise to general theories, or to see if existing general theories are borne out of a specific situation. It is a method of research that simply looks with intense accuracy at the phenomena of the moment and then describes precisely what the researcher sees. In employing this method, the researcher does two things, first, the researcher observes with close scrutiny the population which is bounded by the research parameters, second, the researcher makes a careful record of what he/she observes so that when the aggregate record is made, the researcher can then return to the record to study the observations that have been “described” there.

Salient characteristics of the descriptive research are the following:

- the descriptive method deals with a situation that demands the technique of observation as the principal means of collecting data
- the population for the study must be carefully chosen, clearly defined, and specifically delimited in order to ensure specific parameters
- particular attention should be given to safeguard data from the influence of bias
- although descriptive research relies upon observation for the acquisition of the data, this data must be organised and presented systematically so that valid and accurate conclusions may be drawn from them.

The questionnaire is an instrument used for observing data beyond the physical reach of the observer. There are several guidelines that researcher need to follow when using a questionnaire as the instrument of collecting data. These are:

- assumptions underlying questionnaire construction must fit with realities of life
- all questionnaires should be pretested in a pilot study to the appropriateness of questions
- each item of the questionnaire should have a purpose
- questionnaires should be designed to fulfill a specific purpose.

Descriptive research is used in this study utilizing the survey method to collect descriptive data.

4.3 IMPLEMENTATION OF THE RESEARCH PROCESS

The research process involved both secondary and primary research:

4.3.1 SECONDARY RESEARCH

Published studies and an unpublished dissertation dealing with marketing information, and the role of marketing information in facilitating access to livestock producers in mainstream markets were used extensively as secondary sources of information. This research covered the first three (3) chapters of the dissertation. The research provided the backdrop to the primary objective which is to highlight the marketing information needs of smallholder livestock farmers, who are members of NERPO in the Moretele area of the Bojanala Platinum District Municipality of the North West Province of South Africa.

4.3.2 PRIMARY RESEARCH

Primary research was divided into two phases, namely the preparatory research phase which involved the buyers of livestock and other stakeholders and the smallholder livestock farmers' knowledge phase.

In line with the research methodology proposed in Chapter 1 of this dissertation, the survey method was used to solicit information from respondents.

The determination of the respondents for the survey remained a problem as the focus was on the smallholder livestock farmers that are members of NERPO and located in the Moretele area in the Bojanala Platinum District Municipality of the North West province. The

researcher therefore selected members of NERPO residing in the Moretele area in the Bojanala Platinum District Municipality of the North West province, which can be described as a purposive sampling procedure.

4.3.2.1 THE PREPARATORY RESEARCH PHASE

The research process began by conducting a study amongst the major livestock buyers. A survey was used to gather the data. This was done through the development of a structured questionnaire. (See Appendix A). The questionnaire asked buyers of livestock about their market requirements that included grading, quality, quantity, food safety, price determination distribution channels and promotional issues. A perception, by buyers of livestock, of problems preventing black farmers' participation in mainstream livestock markets was also asked.

In Chapter 3, Section 3.6.3 of this dissertation, a detailed explanation was made on the roles some of these buying organisations play in the livestock distribution channel. A brief explanation on the nature of these organisations follows below:

- **SAFA**

A feedlot is a confined area with watering and feeding facilities where livestock are hand- fed or mechanically fed to consistently produce quality meat. Feedlots buy calves and add mass through intensive feeding. SAFA is a representative association of feedlotters in South Africa.

- **South African Federation of Livestock and Meat Brokers (SAFLA&MB)**

Livestock marketing auctioneers render a service of bringing together a buyer and seller, without owning the livestock, but

assist in the transfer of ownership from producer to buyer. Livestock auctions are arranged by livestock auction agents on a commission basis. Auctions play an important role in livestock marketing, and they are the principal sales outlets for live animals. Vleissentraal Ltd. is a key livestock market agent that was interviewed.

- South African Meat Processors Association (SAMPA)

SAMPA is a voluntary association of stakeholders in the meat processing and related industries. Full membership requires involvement in meat processing in South Africa. Indications are that this organisation has, however, ceased to exist.

- National Federation of Meat Traders (NFMT)

NFMT was formed in 1990 to represent the interests of the distributive meat trade at a national level. The researcher was unable to get hold of this organisation.

- South Africa Consumers Union (SANCU)

SANCU is a voluntary autonomous body which represents millions of consumers. Amongst other functions the union strives to form a united consumer front that will co-ordinate all views of consumer-related matters and to resolve the problems of consumers satisfactorily.

- Association of Meat Importers and Exporters (AMIE)

AMIE's aim is to promote and safeguard the common interests of members in their activities as meat importers and exporters. The researcher was unable to get hold of this organisation.

- Red Meat Abattoir Association (RMAA)

The abattoir industry is responsible for the conversion of livestock to meat. The process remains critical to ensure a safe and wholesome product to consumers. The Meat Safety Act, 2000 (Act 40 of 2000) addresses measures to promote the safety of meat and animal products, and to establish and maintain essential national standards in respect of abattoirs.

The role of the abattoir industry in the meat chain has changed dramatically over the last number of years due to the vertical integration and privatization of the industry. Abattoirs are taking responsibility for the product once it is slaughtered with regards to quality and safety, and at the same time have to incur losses attributed to the poor quality of purchased livestock. The development of the meat industry is also such that abattoir owners are often more involved in the processing side of the product and this has placed an even more direct burden on the abattoir owner.

The overall objective of the association is to provide representation and services to the abattoir industry which will ensure the highest standards of meat safety, and quality to the benefit of the industry and the customer.

- Speculators

There are a number of speculators active in the marketing of livestock in South Africa. Contrary to auctioneers, livestock speculators take ownership and in return resell the animals at a profit. Livestock farmers in this instance have an advantage of not incurring transport costs as these costs are incurred by the

speculator. There is no commission involved as prices are reached through negotiation.

Speculators are usually perceived to be dishonest. 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 paid.

- Private sales

In the developing areas, private sales are an important marketing channel. A private sale is a broad concept which in the case of livestock marketing can comprehensively be viewed as a non - institutionalised activity involved in the buying and selling of various forms of livestock from local farmers. Private sales also include individuals buying livestock for different reasons.

The following organisations were consulted with the view of obtaining their market requirements and perceptions of constraints experienced by smallholder livestock farmers in participating meaningfully in mainstream markets:

- SAFA
- SAFLA-MB
- SANCU
- RMAA
- A livestock agent

- A local speculator
- A local butchery
- A private buyer

Out of eleven (11) major buyers identified, three (3) questionnaires were not returned, either because the organisation was defunct and the address incorrect, or in other cases, the organisation was no longer part of mainstream livestock industry association. The response rate was 73%.

The following organisations could not be traced:

- SAMPA
- NFMT
- AMIE

Personnel responsible for grading and market requirements of the key livestock buyer organisations were contacted telephonically. The arrangement agreed upon between the researcher and buyers of livestock was that the structured questionnaire be mailed electronically to respondents, for them to answer the questions instead of setting up formal interviews. The private buyer was personally interviewed, as was the speculator and a local butchery owner as they did not have access to electronic mailing facilities.

Questionnaires were sent to personnel of buyer organisations who are primarily responsible for dealing with market standards and requirements in each organisation. These individuals are also responsible for setting, in partnership with appropriate government

institutions, livestock industry standards in line with the Product Standards Act of 1990. Also, they assist government to ensure that industry complies with quality standards. For standard setting, the above-mentioned key personnel of the livestock buying organisations work closely with the Directorates: Food Safety and Quality Assurance, Animal Health and other relevant Directorates within the Department of Agriculture, Forestry and Fisheries.

On an international level, South Africa, has in the last few years, penetrated very competitive markets and has, as a result, established capacity to comply with high international food safety and quality standards. Regionally, the officials are actively involved in the harmonisation and coordination of regional livestock grading and marketing requirements. Based on their experiences, they also take a lead in capacitating and sharing information and technology with livestock farmers, located in Southern African and Sub Saharan countries. For this research, a purposive sample was selected from the buyer associations based on their wide experience and knowledge in livestock buyer requirements and standards. The officials were able to answer the questions, relating to livestock product requirements, price formation, promotion and distribution. In addition they shared information on their experiences with the smallholder livestock sector. In cases where there was a need for further clarification, telephonic discussions were held with the buyers of livestock.

A total of sixteen (16) questions were asked to the buyers of livestock. The manner in which questionnaires were answered differed slightly from buyer to buyer depending on their livestock needs. The following table indicates the kind of questions asked in the research involving livestock buyers:

Type of Question	Number of questions	Percentage in total questions asked
Open-ended questions	5	33%
Multiple choice questions	7	47%
Dichotomous questions	1	7%
Ranked questions	2	13%
Total number of questions asked	15	100%

Table 4.1 Buyers' questionnaire.

As part of the preparatory research, other important stakeholders were interviewed with the objective of gathering information on experiences they have with the smallholder livestock farmers marketing information needs.

Informal discussions were held with the following other stakeholders:

- National Agricultural Marketing Council
- Directorate: Marketing Sub Directorate: Commodity Marketing – (DAFF)
- Directorate: Food Safety and Quality Assurance – (DAFF)
- Directorate: Animal Health – DAFF
- ARC
- ConMARK
- NERPO

In addition, Management and Marketing Extension staff members of the Department of Agriculture North West and Moretele municipality were also interviewed. A total number of eight (8) other stakeholders were consulted. The purpose of these discussions was to ascertain the other

stakeholders' experience with smallholder farmers and their perceived constraints to effective participation in marketing activities.

The preparatory phase was successfully concluded. Information gathered from the preparatory phase served as input in the review and conclusion of the farmer questionnaire

4.3.2.2 THE SMALLHOLDER LIVESTOCK FARMER KNOWLEDGE

After the completion of the preparatory study, the structured questionnaire, used in the primary research as well as inputs from other stakeholders, was used to develop a farmer questionnaire that would determine the knowledge of the smallholder livestock farmers regarding the marketing requirements. The farmer questionnaire also covered demographic profiles, access of the livestock farmers to contemporary communication media and relationships with key other stakeholders in the industry. The latter was included to address the secondary objectives of the study. (See Appendix B).

Through the assistance of the North West Provincial Department of Agriculture and the NERPO head office located in Pretoria, a meeting was set up with the respective officials in Moretele. The purpose of the meeting was to discuss and agree on the process for conducting the research. It was agreed that the most effective way of conducting the research was through telephonic interviews. The regional NERPO office, in partnership with the Provincial Department of Agriculture personnel briefed the members about the pending research and requested full cooperation and full assistance during research.

It was established that paid up NERPO members, residing in Moretele varied between 20 and 30. It was decided that a census be conducted due to the small number of farmers.

A register of all members, with contact details, was forwarded to the researcher. This register, constituted the population of the census as it had all the names of NERPO members located in the Moretele Local Municipality of the Bojanala Platinum District Municipality of the North West Province.

There has been a problem with registration as the livestock farmers cannot keep up with the annual registration fees, which amounts to R300.00 for old members and R460.00 for new members per annum. What is important is that these members that belong to the organisation are very committed, as the annual fee is affordable compared to the benefits they receive, including access to the feedlot industry through the auctioneering companies. It appears that the farmers that are not committed are not prepared to pay the annual fees and consequently fall by the wayside. As a way of comparison, it was agreed that a few number of farmers, be interviewed to ascertain why they do not want to be members as well as to glean information regarding their overall successes in the field of livestock farming and marketing.

Only one farmer, residing in the district, who was not a member of NERPO, was interviewed. The information received was not valuable, and therefore not used, the participant was very new and did not understand much about the dynamics of the industry.

Out of a number of twenty four (24) potential respondents, three (3) were not interviewed either because they could not be located or were just not prepared to share the information. Twenty one (21) or 88% of the population were interviewed. The interviews were mainly conducted in English as most farmers had formal education and could follow the discussions. Where applicable, Sotho and Nguni languages were also used.

These farmers sell their livestock on commercial basis and have benefited one way or another, in various government and other programmes. The overarching programme put in place by the department, in partnership with provinces is the Comprehensive Agriculture Support Programme (CASP) which specifically targets land reform beneficiaries. Focus of the CASP programme is on the development of on-and-off farm infrastructure, training and capacity building, technology transfer and advisory services. For livestock, the Directorate: Animal Health for example, has developed the Integrated Animal Improvement programme intended to improve the quality of small-scale farmers' livestock. The Animal Identification programme intended to assist marketing of legally identifiable livestock. In addition, all farmers interviewed had access to 5-10 hectares of land which would either be communal or land acquired through government land reform programmes.

The rest of farmers in the area are not classified as commercial as they keep livestock only for food security and other reasons other than commercial purposes. These livestock farmers, by definition, did not satisfy the participation criteria, especially access to land, and did not form part of the targeted group, were not members of NERPO, and were therefore excluded from the research. A total of twenty six (26) questions were asked.

The questionnaire asked farmers to reflect on their knowledge of marketing mix elements relating to product, pricing formation, existing livestock distribution channels and communication strategies.

The questionnaire also covered corpographic aspects including access to contemporary communication media, demographic profiles and relationships with key other stakeholders in the industry. The following table indicates the kind of questions asked in the research involving smallholder livestock farmers:

Type of Question	Number of questions	Percentage in total questions asked
Open-ended questions	12 (6 demographic)	43%
Dichotomous questions	2(1 demographic)	7%
Multiple choice questions	10 (5 demographic)	36%
Ranked questions	4	14%
Total number of questions asked	28	100%

Table 4.2 Farmers' questionnaire.

It should be noted that there is a difference in the number of questions asked to mainstream buyers of livestock (15) and livestock farmers, who are NERPO members (28). More questions were asked to farmers to also ascertain, the demographic profile of the smallholder farmer, and constraints confronted in accessing mainstream markets, in line with the secondary objectives of the research.

To the best of the researcher's ability, safeguard against bias was observed. Clear trends, however, emerged from the study. Detailed analysis of these trends will be made in the next chapter.

4.4 ADMISSIBILITY OF THE DATA

Only fully completed questionnaires were admitted. The researcher went through all answered questionnaires, in cases where there was lack of clarity, follow-up telephonic discussions were held with the respondents.

4.5 DATA ANALYSIS

Completed questionnaires were screened to ensure that all questions have been adequately answered. Where there was lack of clarity, a follow up was made as all respondents provided full contact details. Microsoft Excel software and SPSS software was used for data analysis.

4.6

CONCLUSION

Data was collected from buyers, other stakeholders and farmers of livestock located in Moretele Local Municipality of the Bojanala Platinum District Municipality in the North West Province. The findings of the empirical research will be presented in the next chapter. These findings will refer to the extent of lack of marketing information relating to market requirements. The impact of demographic characteristics, access to communication media and support given to the livestock farmers will also be detected. The next chapter will give a full a full analysis of the results emanating from the research that was conducted.

CHAPTER 5: RESEARCH FINDINGS

5.1

INTRODUCTION

This chapter will focus on the findings addressing the primary and the secondary objectives of the study. The research process started by first, conducting a preparatory research among key buyers of livestock and other stakeholders. Information gathered from the preparatory phase was used to further develop the questionnaire for the focused primary research phase that involved farmers who are members of NERPO.

The primary objective of the study was to conduct an investigation into the marketing information needs of smallholder livestock farmers that are members of NERPO, located in the Moretele area in the Bojanala Platinum District Municipality of the North West Province.

Flowing from this objective, secondary objectives were:

- to determine the demographic profile of the smallholder livestock farmer and their access to communication media
- to determine the quality of marketing information resources currently available to the smallholder farmer
- to determine the role of support institutions in facilitating marketing information for the smallholder livestock farmer
- to put forward recommendations that will enhance marketing information access by smallholder livestock farmers in Moretele
- to identify further areas of research on the plight of smallholder farmers in South Africa.

Information obtained from the research results addressed both the primary and the secondary research objectives of this study.

The logical process followed on reporting on the research findings will be as follows:

- Section 5.2 below, will explain results emanating from primary research. The process followed was clearly outlined in paragraph 4.3.2 above. The phases in primary research were the preparatory research, which involved research amongst buyers of livestock and other stakeholders (paragraph 4.3.2.1), and the smallholder livestock farmer knowledge research involving farmers who were NERPO members (explained in paragraph 4.3.2.2) above. Section 5.2 addressed the primary objective of the study which was to conduct an investigation into the marketing information needs of smallholder livestock farmers that are members of NERPO, located in the Moretele area in the Bojanala Platinum District Municipality of the North West Province.
- Section 5.3 addressed the secondary objectives of the study. Information addressing the secondary objectives of the study was extracted from the primary research process.

5.2 PRIMARY RESEARCH RESULTS

In line with proposed research methodology outlined in Chapter 4 (paragraph 4.3.2), primary research results were as follows:

5.2.1 RESULTS FROM THE PREPARATORY RESEARCH

The following results emanate from the preparatory research amongst livestock buyers and other stakeholders:

5.2.1.1 RESEARCH RESULTS FROM THE LIVESTOCK BUYERS REQUIREMENTS

There are very few major buyers of livestock in the industry. Key buyer organisations were consulted with the view of obtaining their market requirements and perceptions of constraints experienced by smallholder livestock farmers in participating meaningfully in mainstream markets.

As explained in 4.3.2.1 above, key personnel responsible for grading and meeting of market requirements of the buyer organisations were contacted telephonically. The arrangement agreed upon between the researcher and respondents was that a structured questionnaire be mailed electronically to respondents, for them to answer the questions instead of setting up formal interviews. The following buyer organisations responded to the questionnaires that were mailed electronically.

- SAFA
- SAFLA-MB
- SANCU
- RMAA

In addition, a livestock agent, a local speculator, a local butchery and a private buyer were also interviewed. The following organisations could not be traced, namely;

- SAMPA

- NFMT
- AMIE

The impact of the latter organisations that did not participate in the study is minimal, as the more important buyers were able to participate in the study.

In total, eight (8) out of eleven (11) buyers were consulted, a response rate of 73%.

5.2.1.1.1 BACKGROUND INFORMATION

Section A of the questionnaire focused on information on the name and contact details of the organisation. (See Appendix A).

5.2.1.1.2 LIVESTOCK CLASSIFICATION–RELATED INFORMATION

Section B of the buyer questionnaire focused on the buyer organisation's specific requirements when purchasing livestock. Livestock and carcasses are graded from the most preferred to the least preferred grades. With each classification, each carcass is allocated a class code. The buyer selects a carcass according to own needs and preferences. Chapter 3 of this dissertation gives a full explanation of how livestock is graded according to these specific characteristics.

Buyers' requirements were ascertained as follows:

5.2.1.1.2.1 AGE

With reference to Question 6 of the buyer questionnaire, all mainstream buyers of livestock i.e. SAFA, SAFLA&MB, SANCU, RMAA and the local livestock agent expressed their requirements which are in line with the official livestock age classification system. All key buyers of livestock were interested in the classification characteristics of A, AB, B and C respectively. Buyer needs, however, differed from organisation to organisation. For example, SAFA, SAFLA & MB and the local livestock agent were interested in live animals, whereas RMAA and SANCU were by the nature of their businesses, interested in carcass characteristics.

The local speculator's needs varied, depending on where livestock was going to be resold. If the livestock was going to be sold to feedlots, then the age characteristics become important. In cases where livestock was going to be resold informally, then weight became more important. The local buyer and butchery had no clear understanding of the age characteristics.

5.2.1.1.2.2 FATNESS

With reference to question 7, buyers were asked to indicate their specific requirements according to carcass fatness. RMAA, indicated their requirements as fatness classifications 1, 2, 3, 4 and SANCU indicated their specifications as 1, 2, and 3, SAFLA-MB and the local livestock agent indicated their fatness specification requirements as 0, 1, 2, 3, 4, 5 and 6. These requirements are in line with the official fatness classification codes.

The local speculator's needs varied, depending on where livestock was going to be resold. If the livestock was going to be sold to an abattoir, then the fatness characteristics become important. In cases where

livestock was going to be resold informally, then weight becomes more important. The local butchery owner had no clear understanding of the fatness carcass characteristics. The local buyer preferred bigger animals.

5.2.1.1.2.3 CONFORMATION

Question 8 asked buyers to indicate their livestock conformation requirements. RMAA indicated the conformation requirements as codes 2, 3, 4, SANCU's was 3 and 4 and SAFLA-MB's was 1,2,3,4, and 5 respectively. These requirements are in line with the official conformation classification codes.

The local speculator's needs varied, depending on where livestock was going to be resold. If the livestock was going to be sold to an abattoir or any other formal market, then the conformation characteristics become important. In cases where livestock was going to be resold informally, then conformation was not important. The local buyer and butchery had no clear understanding of the carcass characteristics.

5.2.1.1.2.4 DAMAGE

Question 9 asked buyers to indicate their preferred damage livestock requirements. All buyers indicated that they could just accept slight damage to the carcass. These requirements are in line with the official damage classification codes.

5.2.1.1.2.5 SEX

Question 10 asked buyers to indicate their sex classification requirements. All buyers indicated their preferences for both castrated and non-castrated animals.

5.2.1.1.3 PRICE-RELATED INFORMATION

Section C of the buyer questionnaire focused on the results of buyers' perception on influences on prices and sources of information for livestock prices.

5.2.1.1.3.1 MOST INFLUENTIAL LIVESTOCK CHARACTERISTICS ON PRICE

When buyers were asked to indicate the important livestock characteristics (Question 11), that are important in price determination, the response was as follows; age, level of damage, fatness, and conformation were considered all important in price determination.

For example figure 5.12 illustrate that RMAA considered age, level of damage, fatness and confirmation as important determinants of price and sex as an unimportant determinant of price.

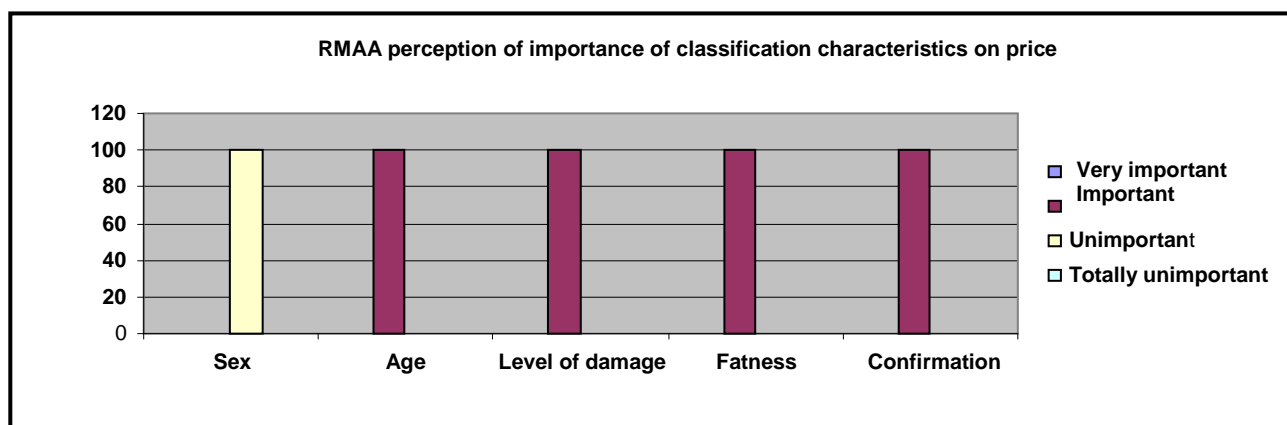


Figure 5.1: RMAA's perception of importance of classification characteristics on price

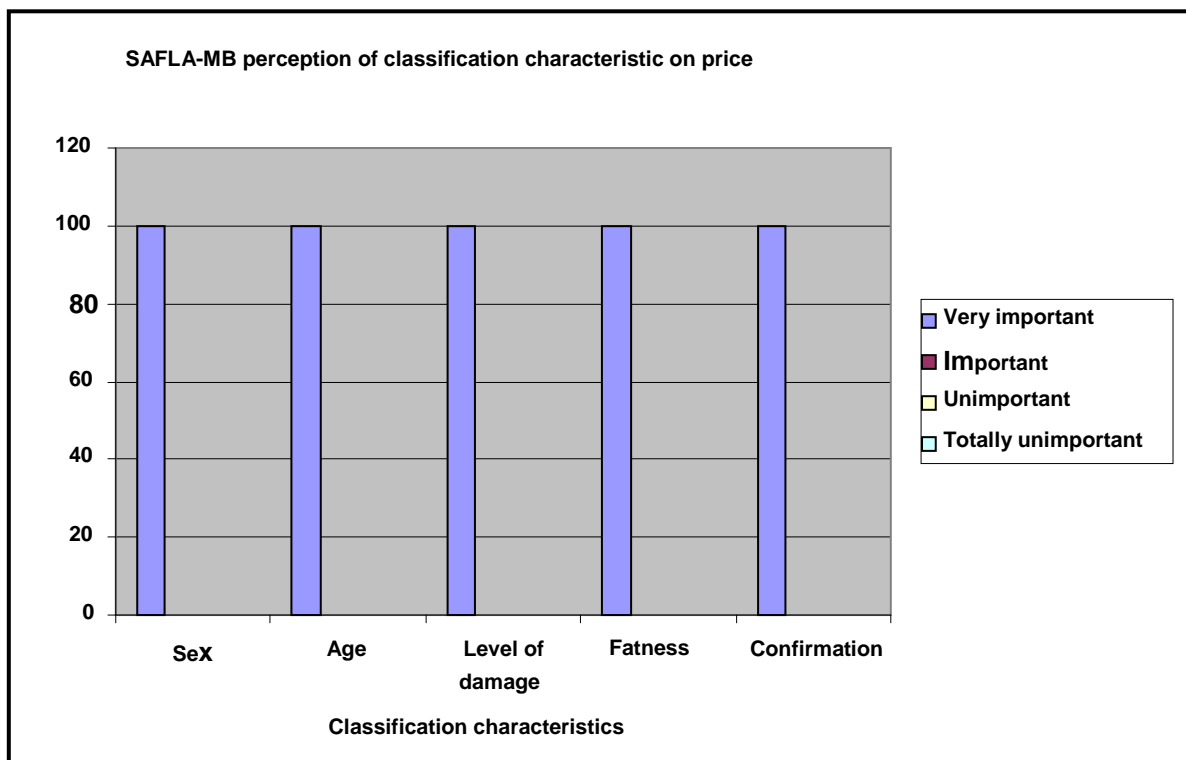


Figure 5.2: SAFLA's perception of importance of classification characteristics on price

SAFLA-MB indicated that age, level of damage, sex, fatness and confirmation were all very important determinants of price, figure 5.2 above.

There was no transparency on how the livestock speculator determines price. A driving force on price determination, from the side of the speculator was on supply and demand, and more important the price that the farmer is prepared to accept through negotiations. It should be noted that the speculator will always offer a lower than market price because of a profit margin that has to be added on when reselling the animal to the ultimate user or consumer.

The local buyer and butchery indicated that the bigger the animal the higher the price that should be paid. There was little understanding of the latter of the quality and price relationships.

5.2.1.1.3.2 GENERAL INFLUENCES ON LIVESTOCK PRICES

Question 12 asked buyers to indicate their own perception of general influences on livestock prices. On the general influences on livestock prices, buyers indicated that these influences were first, the quality of livestock and then supply and demand of livestock.

The speculator emphasised that supply and demand as important influences during sales negotiations.

5.2.1.1.3.3 CURRENT SOURCES OF PRICE AND MARKETING-RELATED INFORMATION

Question 13 asked buyers to indicate the relevant sources of livestock prices used by each organisation. It was established that buyers' sources of livestock marketing information differed from organisation to organisation. As expected, RMAA indicated that the sources of livestock price information is the abattoir industry, SANCU was radio and print media, SAFLA-MB was the abattoir, feedlot and auctioneering industries as well as local livestock agents.

The prevailing market prices for livestock at any given time served as a basis to determine ceiling price at which the livestock speculator is prepared to pay, bearing in mind that a profit margin has to be added on when reselling the animal. In general, the speculator's prices are always lower than the prevailing market prices.

The local buyer and butchery general sources of price information were the local commercial farmers.

5.2.1.1.4 LIVESTOCK DISTRIBUTION CHANNELS

Section D (Question 14) explored the major local channels of distribution used by livestock buyers.

Major buyers of livestock and carcasses indicated that they used all channels of distribution, depending on the nature of the organisation.

The local buyer, speculator and butchery used the shortest distribution channel which was buying direct from the farmer.

5.2.2.1.5 LIVESTOCK PROMOTIONAL TOOLS

Section E (Question 15), of the buyer questionnaire focused on promotional tools buyers responded to in buying livestock.

Key buyers indicated that they respond to personal selling, advertising and free publicity when buying livestock. In the case of the local livestock speculator, transactions were effected by buying directly from the farmer.

The local buyer and butchery were not aware of any promotional tools used in the industry as the transactions were effected directly with the farmer.

5.2.1.1.6 BUYERS GENERAL PERCEPTION OF LACK OF EFFECTIVE PARTICIPATION BY LIVESTOCK FARMERS

Section F (Question 16) of the buyer questionnaire focused on the perception of problems by buyers preventing effective participation of smallholder farmers in mainstream markets. Buyers in the livestock industry strongly agreed that smallholder farmers do not meet their market requirements. The most common challenge confronted in the

sector was the lack of understanding between the quality of livestock and price. The misconception among smallholder farmers was that the older the animal, the higher the price should be, which is not the case, as the direct opposite is true.

The local buyer indicated his preference to buy from commercial farmers as he thought their prices were much more reasonable compared to those of black farmers. He also indicated the advantage of more variety of animals and convenience in transporting animals by the commercial farmer to the required destinations.

5.2.1.2 RESEARCH RESULTS FROM OTHER STAKEHOLDERS

The following support institutions were interviewed informally, to obtain their views on market access constraints confronting smallholder livestock farmers, these organisations were:

- NAMC
- Directorate: Marketing, Sub-Directorate: Commodity Marketing-DAFF
- Directorate: Food Safety and Quality Assurance-DAFF
- Directorate: Animal Health-DAFF
- ARC
- ConMACK
- NERPO
- Provincial extension staff of the North West provincial department

of agriculture

There was general consensus among all organisations that black livestock farmers have a real challenge in understanding livestock market requirements. The mindset of being animal keepers instead of selling livestock at a tender age has to be changed completely. The slight difference between NERPO members and other black farmers was that the members had some knowledge on the age classification as they had to sell their animals young through the auctioneering industry. However, most black livestock farmers did not realise that age, fatness, conformation, and level of damage are all key determinants of price.

It can be concluded that results emanating from the primary preparatory research indicated that the mainstream livestock buyers were very clear on their market requirements relating to product characteristics. These buyers also knew how prices were determined in the industry including key price influences. The mainstream buyers were also very knowledgeable distribution channels available in the industry as well as promotional tools used.

Inputs from other stakeholders also indicated their huge skepticism in smallholder farmers' ability to meet mainstream buyer requirements.

5.2.2 RESULTS FROM THE RESEARCH ON SMALLHOLDER LIVESTOCK FARMER KNOWLEDGE

Out of a total number of twenty four (24) members of NERPO located in Moretele, twenty one (21) smallholder farmers participated in the study, a response rate of 88%.

This section's focus is on the results of the empirical research to determine marketing information gaps prevailing among smallholder

livestock farmers, who were members of NERPO residing in Moretele, in the North West Province.

A list of livestock farmers, all members of NERPO, was used as the population of the study. The person responsible for the compilation and circulation of the list was the district extension officer, located then in Moretele and a member of the North West Department of Agriculture. The extension officer was also responsible for the mobilisation, briefing and facilitation of the telephonic interviews with the farmers. The total number of NERPO members was twenty four (24).

As the research was limited to only twenty one (21) respondents, it could have been that if a larger number of respondents were interviewed, different responses could have been obtained. However, the research results do, to a large extent, reflect the extent of lack of knowledge on marketing information by the targeted study group. The interviews were conducted in both English and African languages. The research findings are divided into two sections, namely:

Section 5.2.2.1 which focus on descriptive statistics from the smallholder livestock farmers

Section 5.2.2.2 which focus on inferential statistical analysis of the smallholder farmers' survey.

5.2.2.1 SECTION A: DESCRIPTIVE STATISTICS FROM THE SMALLHOLDER LIVESTOCK FARMERS

5.2.2.1.1 BACKGROUND

Section: A of the farmer questionnaire focused on the corpographic profile and livestock ownership of the respondents. The general profile of the respondents was a black elderly male population, with a post-

matric educational qualification. Most have been teachers who had retired and went for livestock farming on a full-time basis. Demographic results from the population study were as follows:

5.2.2.1.1.1 TYPE OF BUSINESS OWNERSHIP

With reference to Question 3 of the farmer questionnaire, Figure 5.1 explains the types of businesses owned by the farmers:

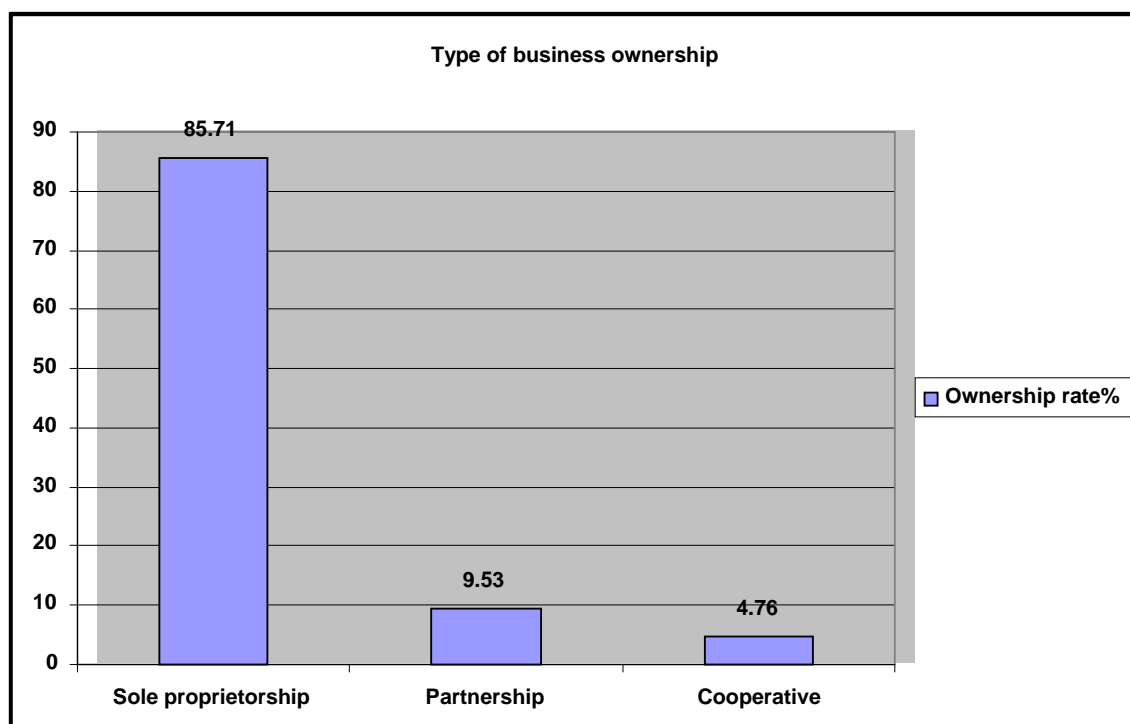


Figure 5.3: Types of business ownership.

Figure 5.1 illustrate that the majority of respondents, 85.71%, were sole owners of their businesses, the rest are partnerships and a cooperative at 9.53% and 4.76% respectively.

5.2.2.1.1.2 RACE

With reference to Question 7 of the farmer questionnaire, it was established that all respondents were black South Africans. No members from other racial groups belong to the commodity association.

5.2.2.1.1.3 GENDER

With reference to Question 8 of the questionnaire, it was established that all twenty one (21) respondents were males. Not one of the farmers was female. Females were therefore not represented in this study as none were members of NERPO.

5.2.2.1.1.4 AGE DISTRIBUTION

With reference to Question 9, Figure 5.2 below outlines the age distribution of the respondents;

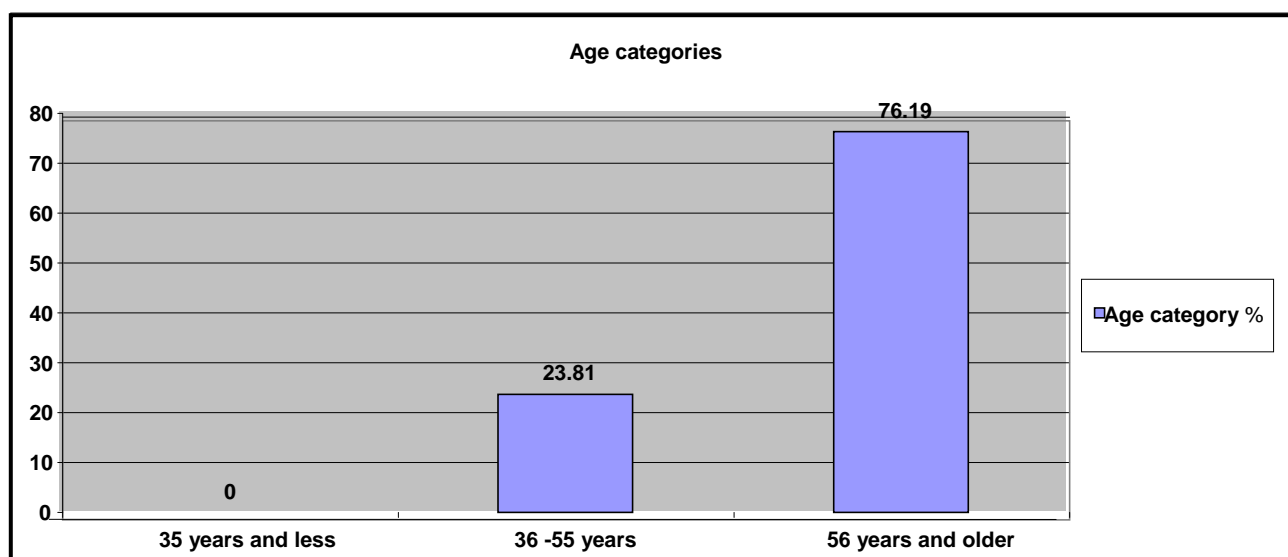


Figure 5.4: Age distribution of the farmers' population.

From Figure 5.2 above, it can be established that most of the respondents 76.19% were 56 years and older, 23.81% were between the ages 35 and 55 and none were less than 35 years. The youth was therefore not represented in this study as none were members of NERPO.

5.2.2.1.1.5 EDUCATIONAL LEVEL DISTRIBUTION

With reference to question 10, the figure below (Figure 5.3) illustrates the distribution of the educational levels of the population;

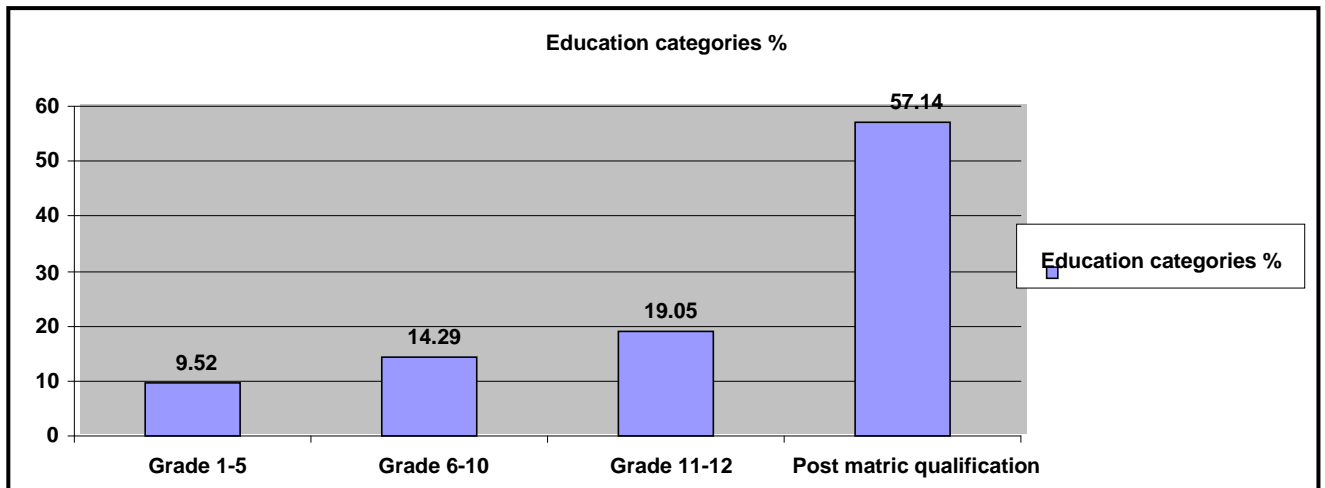


Figure 5.5: Educational level distributions.

Figure 5.3 illustrate that 9.52% had Grade 1-5, 14.29% had Grade 6-10, 19.05% had Grade 11-12, and 57.14 % had post-matric qualifications.

5.2.2.1.1.6 LIVESTOCK OWNERSHIP

With reference to Question 11 which relates to type of livestock owned by the respondents, the response is illustrated by Figure 5.4 below:

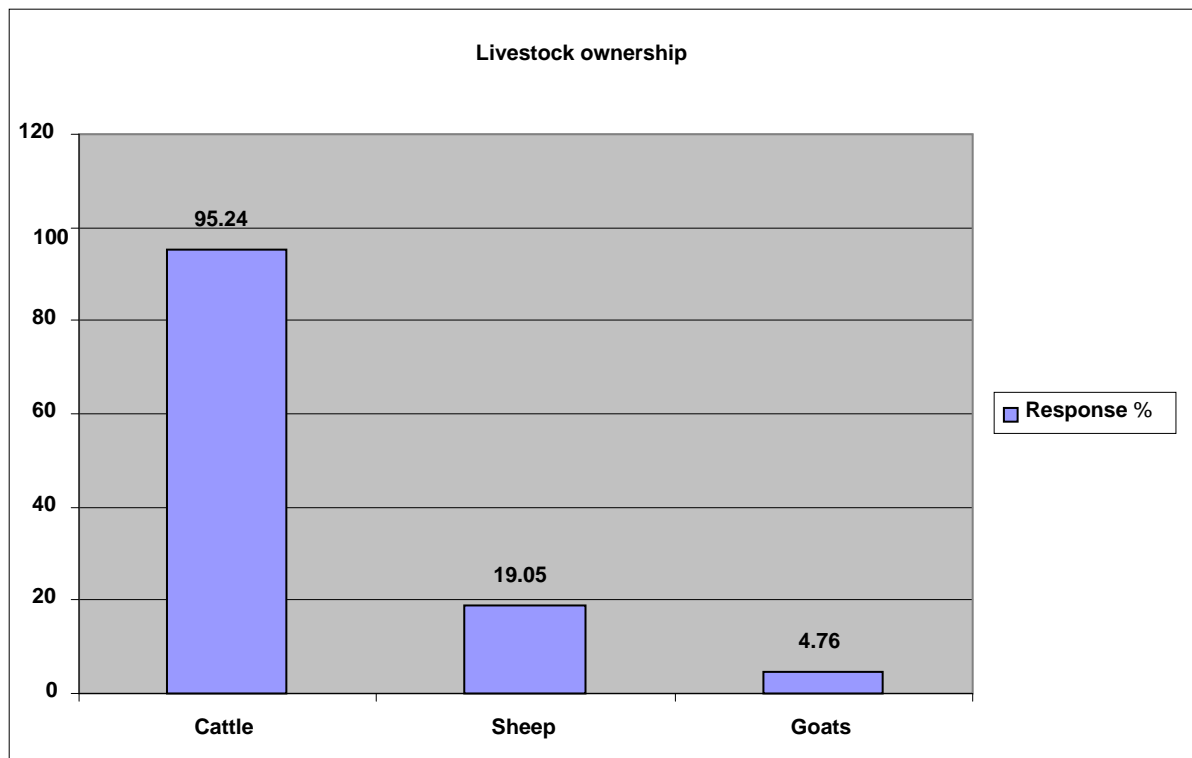


Figure 5.6: Livestock ownership according to type.

From the above figure, it is clear that 95.24% of the respondents were cattle owners. Only a few owned goats and sheep at 19.05% and 4.76% respectively.

With reference to Question 12 which relates to type of livestock owned by the respondents, the response is illustrated below:

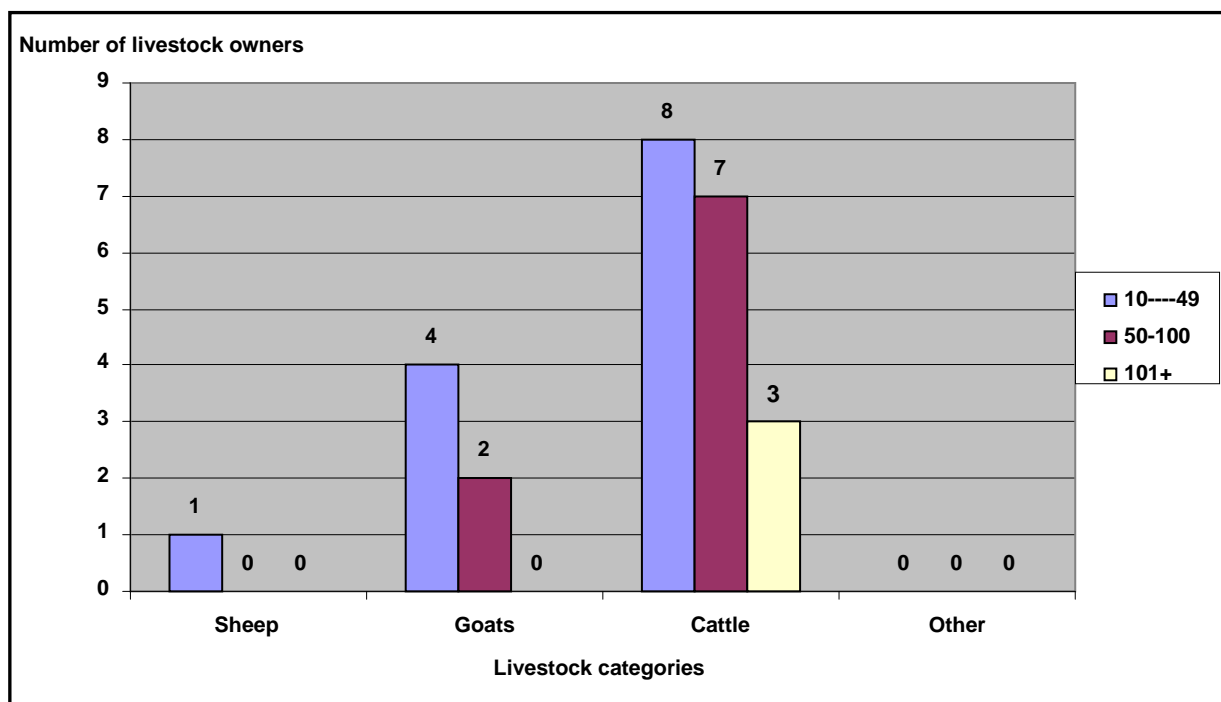


Figure 5.7: Livestock ownership according to numbers.

The bulk of the respondents (15) owned between 10-100 cattle. However, only a few, (3) own more than 101 cattle. Only one respondent owned sheep. There are only four (4) and two (2) respondents who owned between 10-49 goats, and 50- 100 goats respectively.

The following subsections outline the results of the findings of the gap of knowledge in various aspects relating to product characteristics, price formation, alternative channels of distribution and promotional tools used in the livestock industry.

5.2.2.1.2 GAP IN KNOWLEDGE OF LIVESTOCK CHARACTERISTICS

Section: B of the farmer questionnaire related to the farmers' knowledge of livestock classification-related information. This section focused on an investigation into the gap of knowledge in livestock classification by smallholder livestock farmers in the Moretele area in the Bojanala Platinum District Municipality of the North West Province. This gap of knowledge was compared with the livestock buyer requirements, which is in line with the South African official livestock classifications provided for in the Agricultural Product Standards Act, Number 119 of 1990.

Livestock and carcasses are graded from the most preferred to the least preferred grades. With each classification, each carcass is allocated a class code. The buyer selects a carcass according to own needs and preferences. Chapter 3 of this dissertation gives a full explanation of how livestock is graded according to these specific characteristics. See section 3.6.1.

Findings on farmers' knowledge on livestock classification indicated that there was a big gap in this area. Farmers' knowledge was ascertained on the following official classification characteristics:

5.2.2.1.2.1 AGE

Question 13 of the farmer questionnaire referred to farmers' knowledge of livestock age classification. The official classification of livestock according to age is outlined in the following table (Table 5.1) below: Section 3.6.1 in Chapter 3 explains in detail how age, conformation, fatness and other characteristics are used to classify livestock in the market place. For the sake of clarity, livestock age characteristics are again illustrated below:

Age	Classification characteristics
0 permanent incisors	A
1-2 permanent incisors	AB
3-6 permanent incisors	B
6+ permanent incisors	C

Table 5.1 Livestock age classification.

When asked to indicate their knowledge of livestock classification on age, the respondents in the study responded as follows:

Most of them kept mental record of when the animals were born, and knew that they had to sell the animals young to the auctions. They also knew that it was not wise to sell the animal when it was three (3) years or older. They did acknowledge that they fetched good income when animals were sold at the age of two years or less.

When asked to indicate their knowledge of age of livestock classification according to the number of incisors the response was as illustrated in the following figure (Figure 5.8):

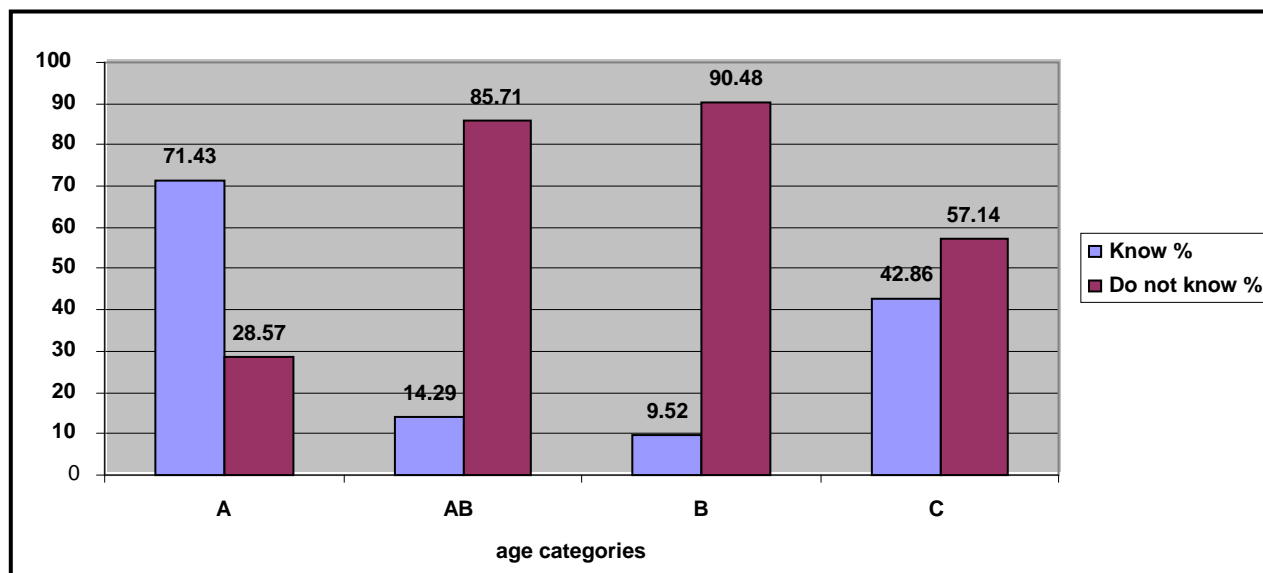


Figure 5.8: Farmers knowledge of livestock classification according to number of incisors.

As illustrated in the figure above, a large percentage 71.43% of the farmers interviewed knew how to classify livestock for Grade A. This knowledge is accumulated through selling the animals through the livestock auctioneering industry.

However, a large percentage 85.71%, 90.48% and 57.14% respectively did not know how to classify livestock using the official classification codes for Classes AB, B and C respectively. Except for the Grade A classification, these farmers had little knowledge of the official livestock age classification system.

It was therefore not possible to test farmers' knowledge of buyers' requirements, which are in line with the official age classification codes, (section 5.2.1.1.2.1), when there was a bigger challenge in understanding the rest of the official South African livestock age classification system.

5.2. 2.1.2.2 FATNESS

Question 14 of the questionnaire refers to farmers' knowledge of livestock fatness classification that adequately meet livestock customer requirements:

Again, the following table (Table 5.2) illustrates the official classification of livestock according to fatness:

Fatness	Classification characteristics
No fat	0
Very lean	1
Lean	2
Medium	3
Fat	4
Slightly over fat	5
excessively over fat	6

Table 5.2 Fatness classification of livestock carcasses

When asked to indicate their knowledge of livestock classification according to fatness, the respondents in the study responded as illustrated in figure 5.9:

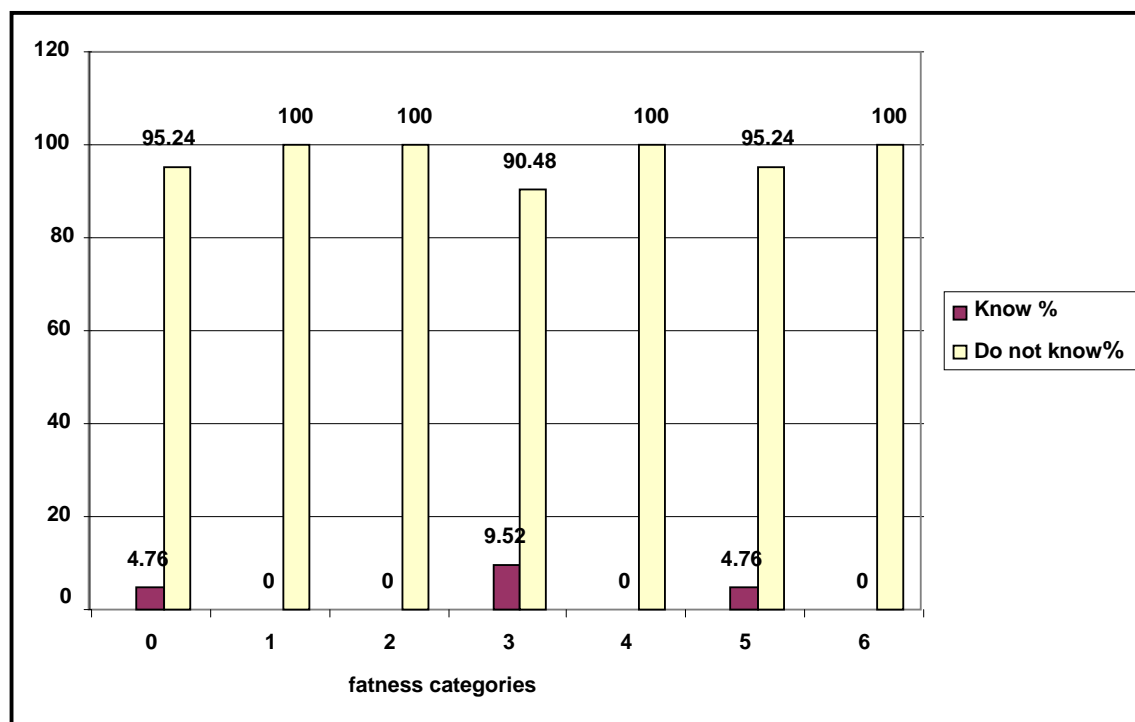


Figure 5.9: Farmers knowledge on fatness classification.

From the above figure, (Figure 5.9), it is clear that the farmers had little knowledge on how to classify the animal carcasses according to fatness. The results on not having knowledge for this classification characteristic was 95.24%, 100%, 100%, 90.48%, 100%, 95.24% and 100% for the classes 0, 1, 2, 3, 4, 5 and 6 respectively.

It was therefore not possible to test farmers' knowledge of buyers' requirements, (section 5.2.1.1.2.2), which are in line with the official fatness classification codes, when there was a bigger challenge in understanding the official South African livestock fatness classification system.

5.2.2.1.2.3 CONFORMATION

Question 15 of the questionnaire refers to farmers' knowledge of livestock conformation classifications that adequately meet livestock customer requirements. Confirmation is the way the carcass looks and describes the ratio between meat and bone. This is very important when one selects animals for the market.

Official carcass conformation is assigned 1 to 5 conformation classes. These conformation classes are classified as indicated in Table 5.3:

Conformation class	Description
1	Very flat
2	Flat
3	Medium
4	Round
5	Very round

Table 5.3 Official conformation of beef carcasses.

When asked to indicate their knowledge of carcass conformation, the results are illustrated in figure 5.10:

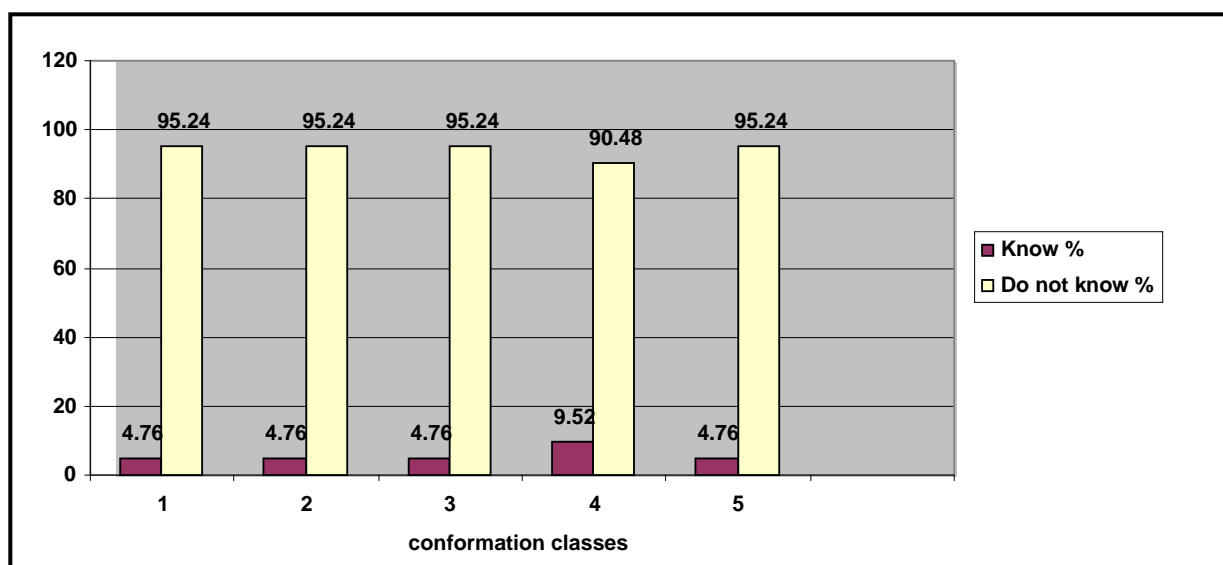


Figure 5.10: Farmers knowledge on conformation classes.

As the above figure indicates, for conformation classes 1 to 5, the degree of having no knowledge was 95.24%, 95.24%, 95.24%, 90.48%, and 95.24%, respectively.

It was therefore not possible to test farmers' knowledge of buyers' requirements, (see section 5.2.1.1.2.3), which are in line with the official conformation classification codes when there was a bigger challenge in understanding the official South African livestock conformation classification system.

5.2.2.1.2.4 DAMAGE

Question 16 of the farmer questionnaire relates to the farmers' knowledge of livestock damage classification. Table 5.4 below explains the official classification characteristics of livestock damage.

Class	Damage
1	Slight
2	Moderate
3	Severe

Table 5.4 Official classification of damage characteristics of livestock.

Figure 5.11 below illustrates the response received from the study group when asked to indicate their knowledge in carcass damage characteristics. 90.48%, 85.71% and 90.48% of the farmers did not

know how to classify damage characteristics on carcasses as slight, moderate or severe, respectively.

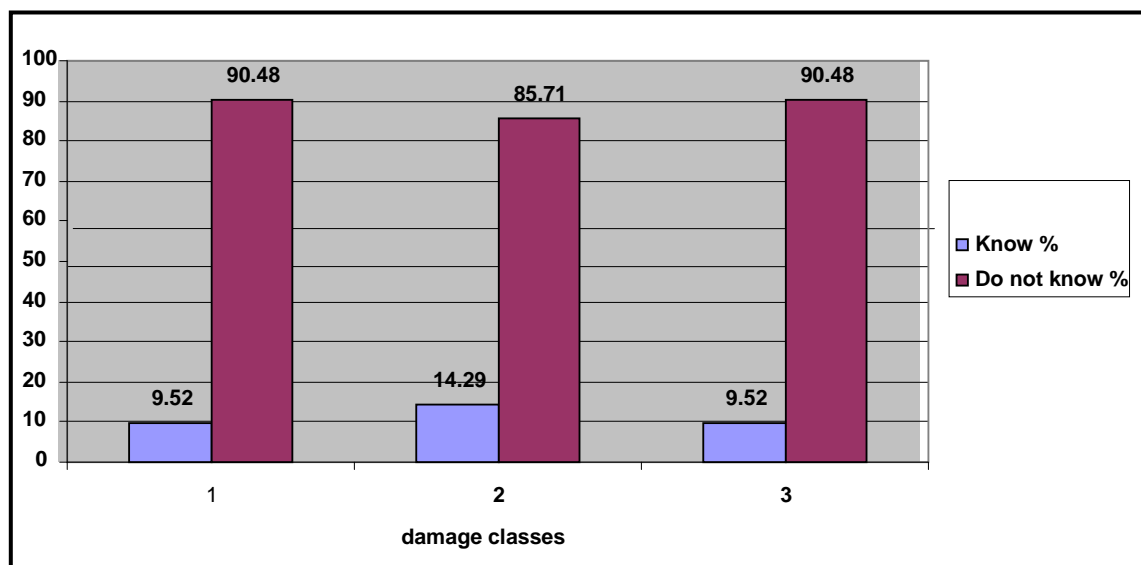


Figure 5.11: Farmers knowledge of carcass damage characteristics.

Farmers' however did not have any knowledge on how the damage characteristics were classified. There is a clear gap of knowledge in this classification characteristic.

It was therefore not possible to test farmers' knowledge of buyers' requirements, (see section 5.2.1.1.2.4), which are in line with the official damage classification codes when there was a bigger challenge in understanding the official South African livestock damage classification system.

5.2.2.1.2.5 SEX

Though there are no official codes for sex classification, respondents were asked to indicate their knowledge between livestock that has been castrated, and not castrated. (Question 17). The following figure, (Figure 5.12) illustrates the respondents' knowledge between castrated and non-castrated animals.

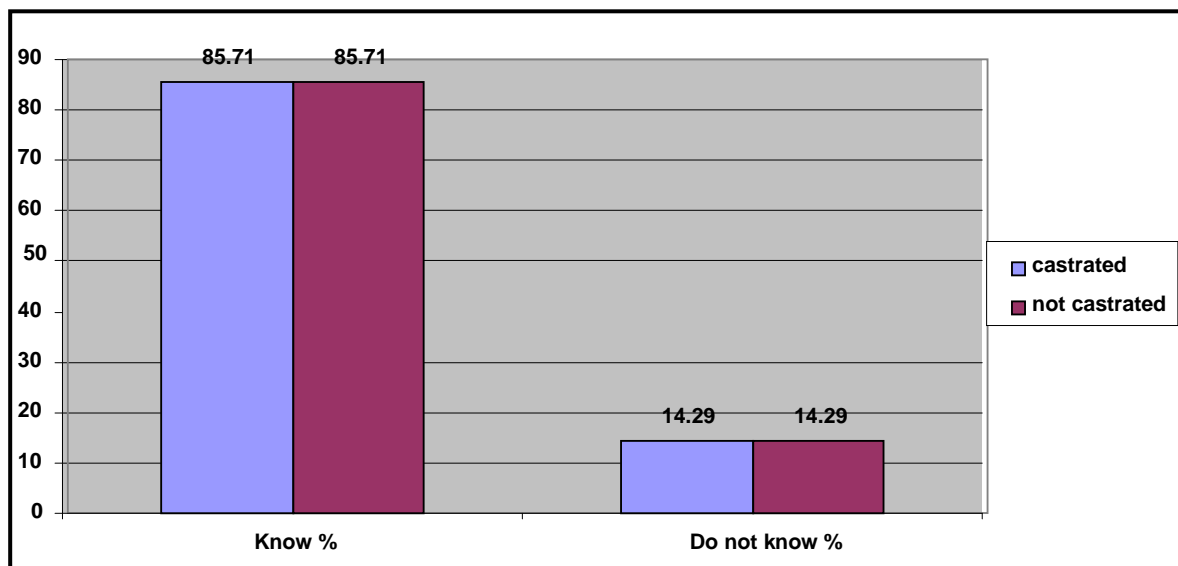


Figure 5.12: Farmers knowledge of castrated livestock.

On this characteristic, farmers' knowledge, as indicated above was good, and consequently met buyer specifications for both castrated and non castrated animals.

5.2.2.1.3 GAP IN THE KNOWLEDGE OF SOURCES OF MARKETING INFORMATION AND INFLUENCES ON PRICES

The objective of Section C of the farmer questionnaire was to ascertain farmers' knowledge on price formation in the industry. This section ascertained farmers' current sources of price and marketing related information and their perception of influences in livestock prices. The section also ascertained the farmers' understanding of the product and price relationships.

As mentioned in Chapter 3 of this dissertation, price formation is determined by marketing forces based on demand and supply. If the supply is higher than demand, the producer price will decrease and vice versa.

5.2.2.1.3.1 CURRENT SOURCES OF PRICE AND MARKETING-RELATED INFORMATION

In Question 18.1 of the questionnaire, when asked about their current sources of livestock price and marketing related information, the farmers responded as illustrated in the following table, (Table 5.5):

Current sources of livestock marketing information	Response %
Abattoir industry	0
Feedlot industry	4.76
Livestock auctioneering industry	95.24
SAMIC	4.76
Internet	0
Print media (newspapers, industry magazines, etc.)	14.29
Government officials	52.57
Local livestock agents	28.57
Other farmers	33.33
Radio	0
Cell phone	9.52
Television	4.76
Other	42.88

Table 5.5 Farmers' sources of livestock marketing information. (More than one source was mentioned by respondents resulting in total not adding up to 100.)

From the above figure, it is clear that for NERPO members, the most important source of livestock price and market related information is the livestock auctioneering industry (95.24%), the other important sources are government officials and other sources with 52.57% and 42.88% respectively.

Under "Other", the respondents indicated that relatives, friends, villagers and other members of the community are other important but informal sources of marketing-related information. The kind of information shared related to, for example, when and where livestock auctions will be held, information on local livestock agents, etc. This result is not surprising as the auctioneering industry is the most important channel for marketing livestock for these farmers. It was clear that farmers only used one source of price information and were not aware of any other alternative sources.

However, under section 5.2.1.1.3.3, different buyers, i.e., RMAA, SANCU and SAFLA-MB indicated different sources of livestock marketing information.

5.2. 2.1.3.2 QUALITY/USEFULNESS OF PRICE AND MARKETING-RELATED INFORMATION

With reference to questions 18.2, the importance of the source of marketing information had to be ascertained. The results are reflected in the following figure (Figure 5.13):

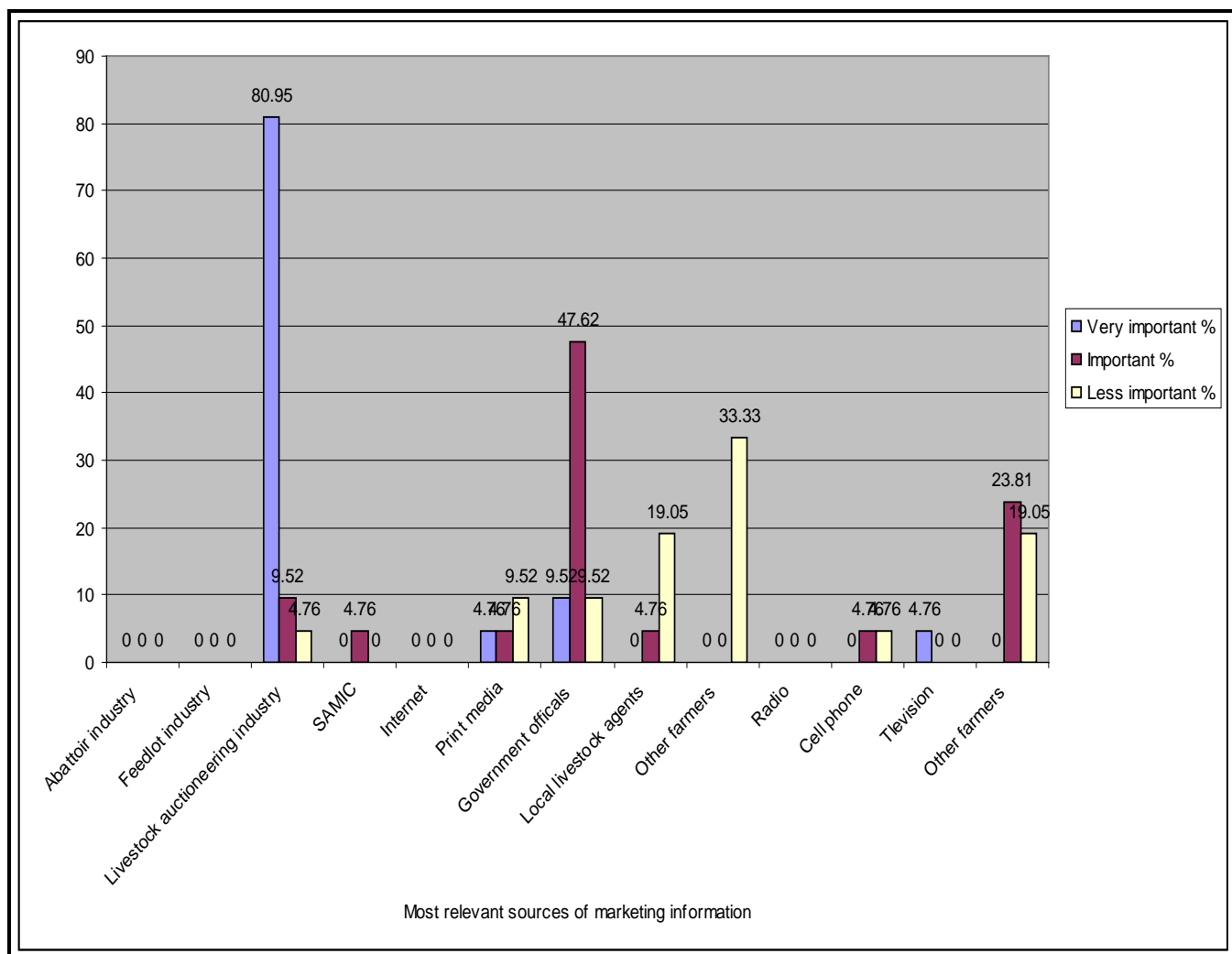


Figure 5.13: Important sources of marketing information.

Judging from the figure above, (Figure 5.11) it is clear that the livestock auctioneering industry is the most important source of marketing information for the study group (80.95 %).

Under question 18.3 when respondents were asked about the usefulness or quality of information only 23.81% of the study group indicated that the information was useful, 19.06% indicated that the information was not very useful, the rest did not respond.

5.2.2.1.3.3 MOST INFLUENTIAL LIVESTOCK CHARACTERISTICS ON PRICE

Through Question 19, farmers were asked to rank livestock characteristics influence on price, according to each characteristic's importance. The study group responded as illustrated in the figure 5.14 below:

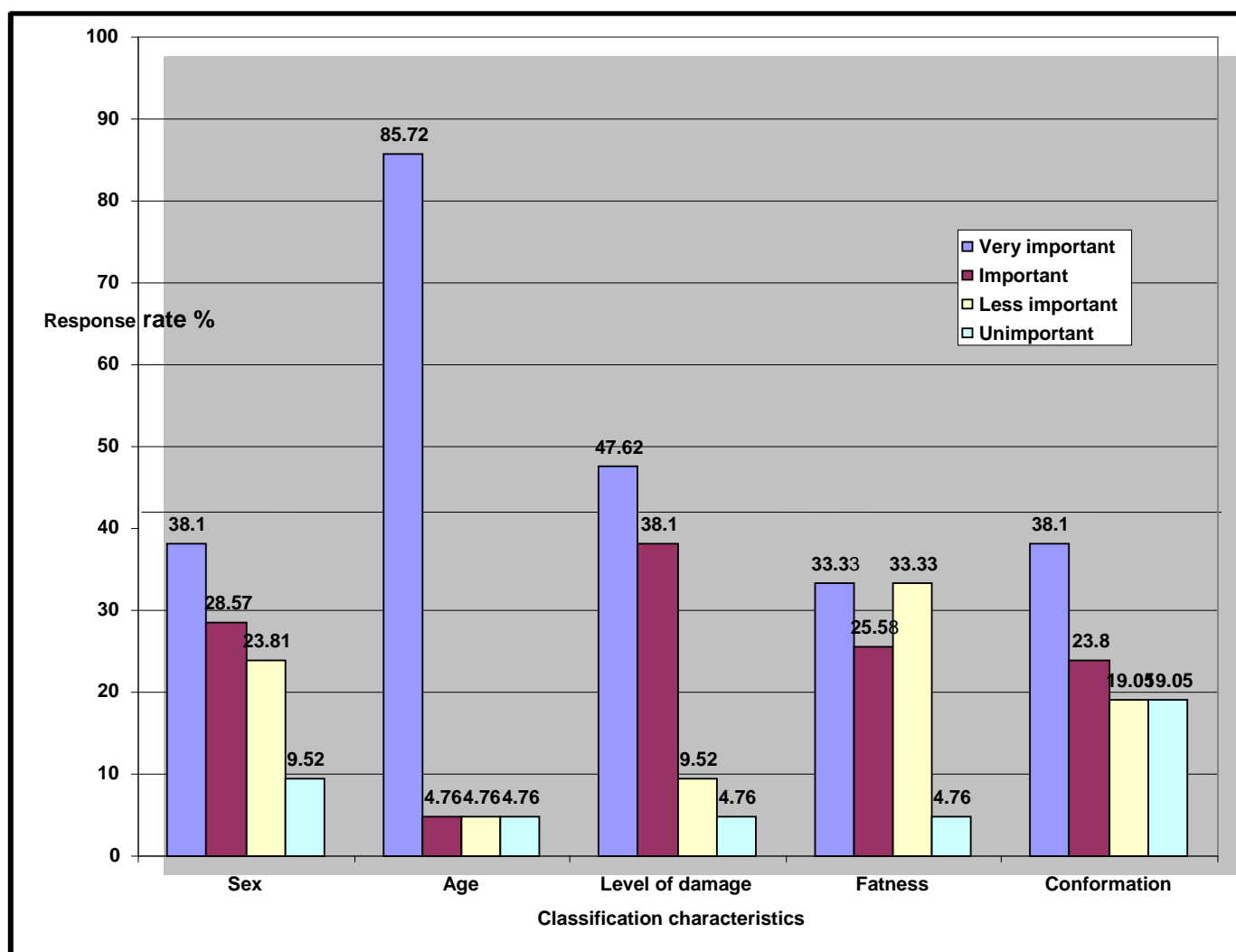


Figure 5.14: Importance of livestock characteristics to price formation.

According to these farmers, age is a very important determinant of price as indicated by 85.72% of respondents. It is understandable why these farmers rank age as very important as they sell their animals young only to one marketing channel, which is the livestock auctioneering industry. Level of damage was pitched at 47.62% and conformation at 38.1% of the respondents that considered these characteristics as very important.

There is a gap of knowledge amongst the study group in understanding that other livestock characteristics including conformation, level of damage, fatness and sex are just as important as age in price

determination. This is clearly illustrated by responses from RMAA and SAFLA–MB under section 5.2.1.1.3.1 above.

5.2.2.1.3.4 GENERAL INFLUENCES ON LIVESTOCK PRICES

Referring to Question 20 of the questionnaire, the following figure (Figure 5.15) illustrates the farmers' perception on influences of livestock prices:

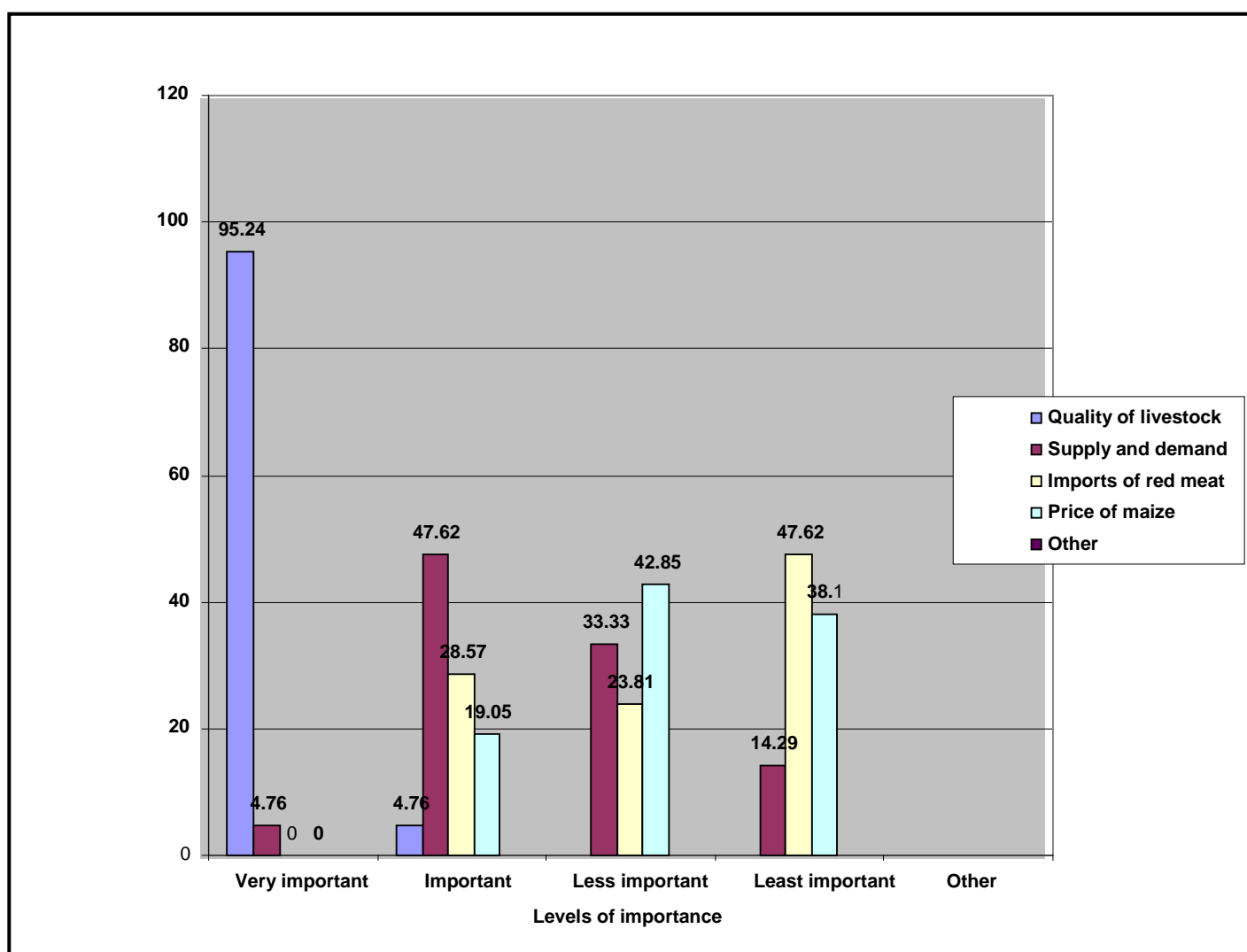


Figure 5.15 General influences on livestock prices.

There was agreement amongst the study group and buyers of livestock on the general influences on livestock prices. These were first, the quality of livestock and then supply and demand of livestock.

5.2.2.1.4 GAP IN KNOWLEDGE OF LIVESTOCK DISTRIBUTION CHANNELS

Section D of the Questionnaire explored farmers' knowledge on major local channels of distribution used in the livestock industry. The purpose was to ascertain the gap of knowledge on the side of the respondents on the alternative channels of distribution.

5.2.2.1.4.1 MAJOR DISTRIBUTION CHANNELS USED

Question 21 of the farmers' questionnaire explored the major channels used by the farmers. Figure 5.16 below illustrates major distribution channels used by farmers:

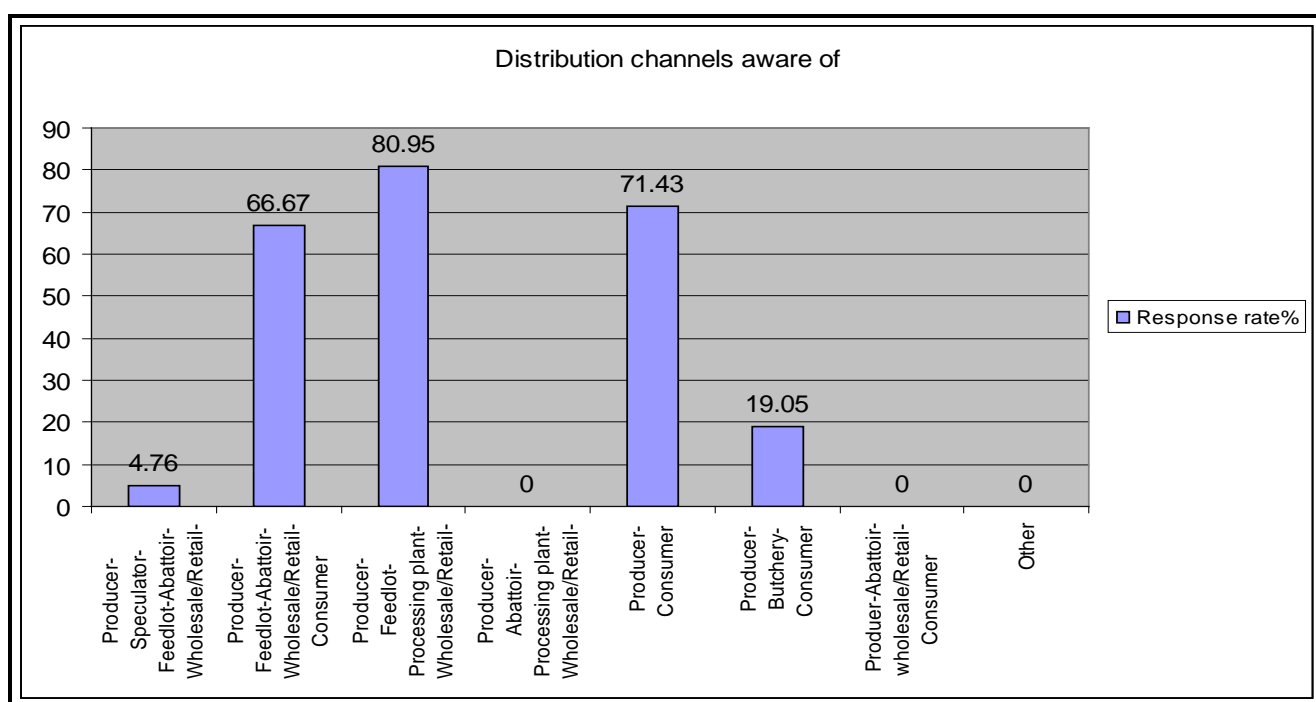


Figure 5.16 Major channels used by the farmers.

From the figure above, it is very clear that channels producer-feedlot-processing plant-wholesale/retailer, producer-feedlot-processing plant-wholesale/retailer-consumer, producer-abattoir-processing plant-wholesale/retailer-consumer were the most popular amongst the farmers. There was however, great reservation about using the producer-consumer channel as low prices are fetched when selling

livestock locally. Local consumers only look at the size and fatness of the livestock and nothing else, whereas, age is one of the most important determinants of price especially when selling through the livestock auctions.

5.2.2.1.4.2 DISTRIBUTION CHANNELS NOT AWARE OF

When asked about distribution channels the members of the study group were not aware of, (Question 22), the response was as illustrated by the Figure 5.17 below:

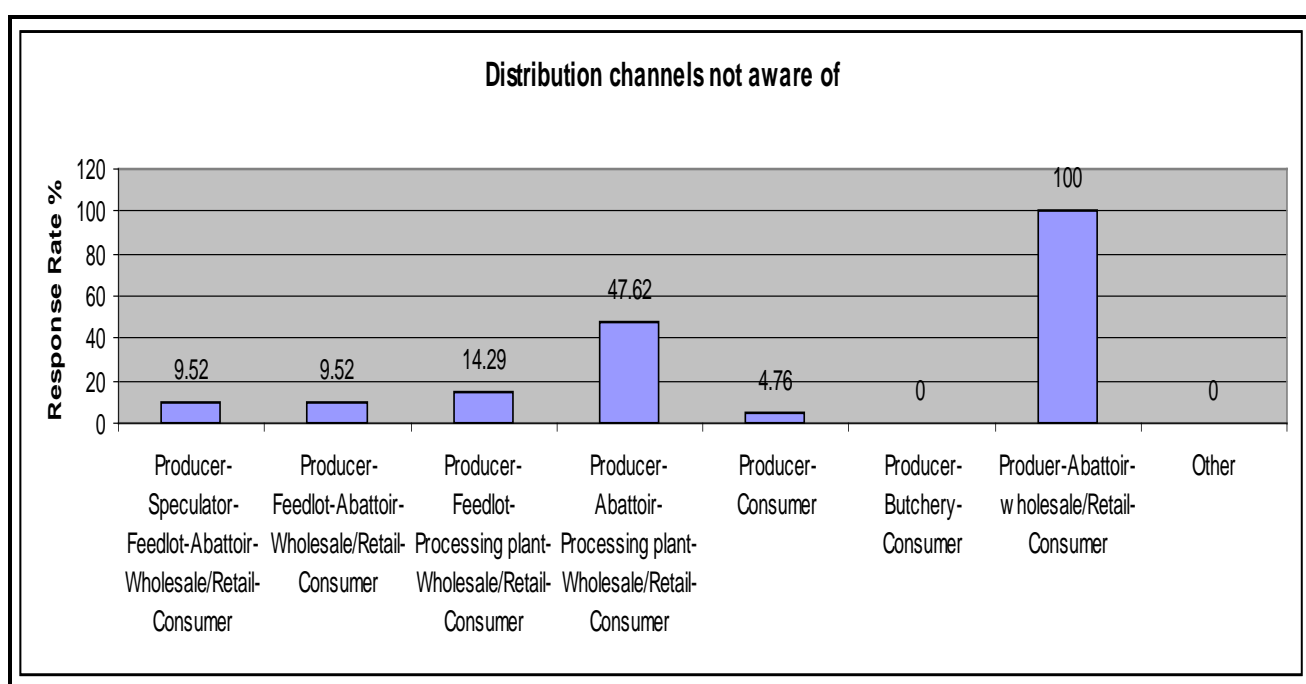


Figure 5.17 Distribution channels farmers are not aware of.

From the above figure it was very clear that the farmers were not aware of the abattoir industry, (100%), as a very important distribution channel. On further probing, it was ascertained that there was little information about the abattoir industry and how prices are determined in that industry. A further explanation given was that there are known abattoirs within the vicinity, but little is known on how these organisations operate and it was stated that there is no transparency on how prices are determined.

A clear gap of lack of knowledge of various distribution channels used in the industry exists among farmers.

5.2.2.1.5 GAP IN KNOWLEDGE OF LIVESTOCK PROMOTIONAL TOOLS

Section E of the farmer questionnaire sought to ascertain to tools used to communicate information to buyers of livestock. Question 23 of the questionnaire ascertained the extent to which farmers are not aware of livestock promotional tools. The figure below illustrates the extent to which there is lack of knowledge of promotional tools available to the farmers (Figure 5.18):

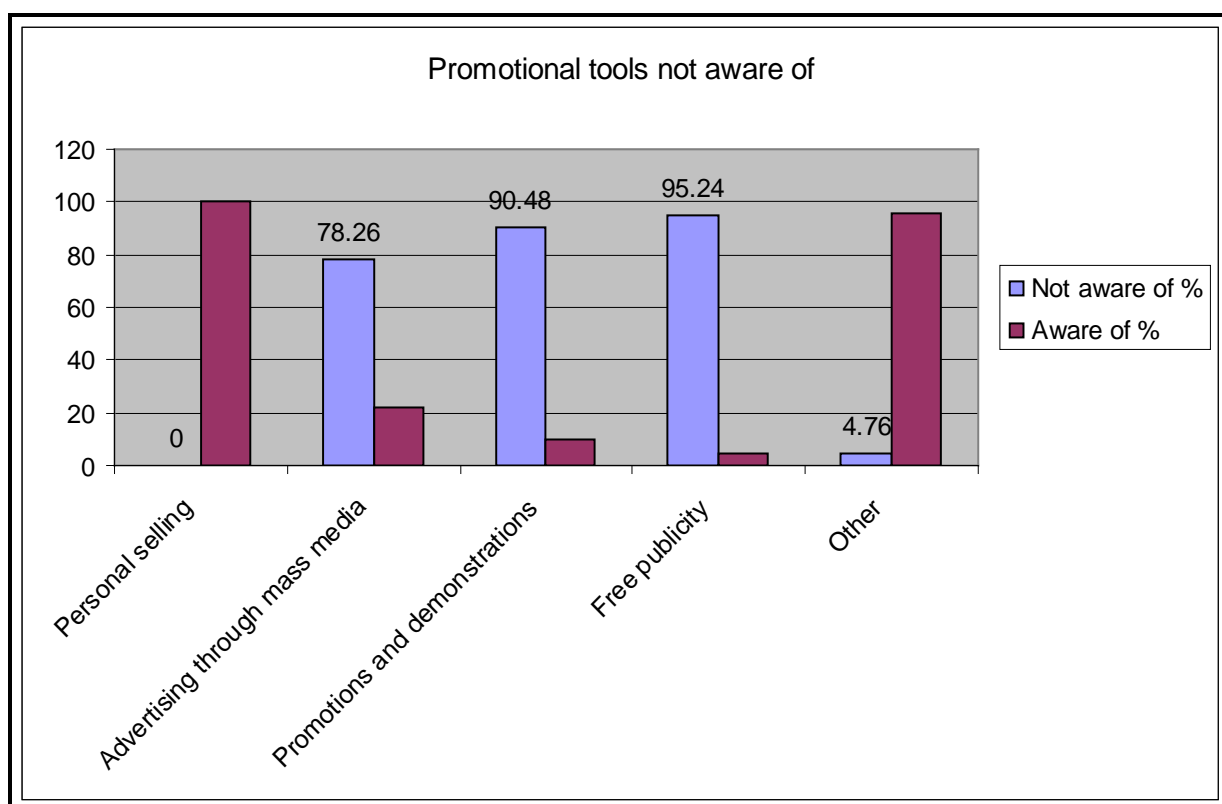


Figure 5:18 Promotional tools not aware of.

The levels of lack of knowledge on promotional tools are very high as illustrated by the Figure 5.18 above. 78.26%, 90.48% and 95.24% of the farmers are not aware of advertising, promotions and demonstrations and free publicity as promotional tools that could be used to market their livestock respectively.

The following section (5.2.3) will focus on the inferential statistical analysis of the study;

5.2.3 INFERENTIAL STATISTICAL ANALYSIS

5.2.3.1 STATISTICAL TECHNIQUES

5.2.3.1.1 CROSS TABULATION

Cross tabulations display the joint distribution of two or more variables. They are usually presented in a matrix, called a contingency table. Whereas a frequency distribution table describes the distribution of one variable, a contingency table describes the distribution of two or more variables simultaneously. It merges two or more frequency distribution tables into one. Each cell gives the number of respondents that gave that combination of responses, that is, each cell contains a single cross tabulation. A statistical measure of association is used to determine if there exist statistical significant associations between variables. For example, in this study, one can determine if there is a significant statistical association between the age of livestock farmers and knowledge of fatness classifications.

The statistical measure of association that will be used in the study is the Goodman and Kruskal Tau value. The Goodman and Kruskal Tau measure of association is available in the latest versions of the Statistical Package for Social Science (SPSS), including SPSS 18.0 of 2010. SPSS is among the most widely used computer programmes for statistical analysis in social sciences.

The Goodman and Kruskal Tau value is a Proportional Reduction in Error Measure. If there is a strong association, there will be a substantial reduction in error from knowing the joint distribution of the two variables, X and Y. The value indicates the % amount by which we

can reduce our error in predicting the dependent variable (for example, fatness classification knowledge) by having knowledge about the independent variable, (for example, age of the farmer) over having no knowledge about the independent variable.

A statistically significant difference means there is statistical evidence that there is a difference, it does not mean the difference is necessarily large, important, or significant in the common meaning of the word. The significance level of a test is defined as the probability of making a decision to reject the null hypothesis when the null hypothesis is actually true (a decision known as a Type 1 error). A level of 5 and 10% will be used. If the p-value is less than the significance level, then the null hypothesis is rejected. The hypotheses that were tested were:

H_0 : There is no association between the variables in each of the cross tabulations

H_1 : There is an association between the variables in each of the cross tabulations

The interpretation is thus that, if the significance value is less than 0.10, for a significance level of 10%, then there exists a statistically significant relationship/association between, for example, age of the livestock farmers and the fatness classification knowledge.

The sections below will illustrate the results emanating from the cross tabulations made from the study:

5.2.3.1.1.1 HYPOTHESIS TESTING: FARMERS' AGE AND AGE CLASSIFICATION KNOWLEDGE.

Farmers age and age classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class A age classification knowledge	0.002	0.823	not rejected
Class AB age classification knowledge	.008	.683	not rejected
Class B age classification knowledge	.040	.372	not rejected
Class C Age classification knowledge	.038	.386	Not rejected

Table 5.6: Farmers' age and age classification knowledge.

From the results above, it can be concluded that there is no statistically significant association between farmers' age and age classification knowledge, for all classes.

5.2.3.1.1.2 HYPOTHESIS TESTING: FARMERS' AGE AND FATNESS CLASSIFICATION KNOWLEDGE

Farmers age and fatness classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 0 fatness classification knowledge	.016	.576	not rejected
Class 3 fatness classification knowledge	.040	.372	not rejected
Class 5fatness classification knowledge	.016	.576	not rejected

Table 5.7: Farmers' age and fatness classification knowledge.

From the results above, it can be concluded that there is no statistically significant association between farmers' age and fatness classification knowledge for classes 0, 3 and 5.

5.2.3.1.1.3 HYPOTHESIS TESTING: FARMERS' AGE AND CONFORMATION CLASSIFICATION KNOWLEDGE

Farmers age and conformation classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 1 conformation classification knowledge	.016	.576	not rejected
Class 2 conformation classification knowledge	.160	.074	Rejected
Class 3 conformation classification knowledge	.160	.074	Rejected
Class 4 conformation classification knowledge	.040	.372	not rejected
Class 5 conformation classification knowledge	.016	.0.576	not rejected

Table 5.8: Farmers' age and conformation classification knowledge.

From the above results, it is clear that there is no statistically significant association between age of farmers and conformation 1, 4 and 5 classification knowledge. However, there is a statistical significant association ($p\text{-value} = 0.074$) between farmers age and conformation classification knowledge for classes 2 and 3.at the 10% level of significance. In thus indicates that having knowledge about the farmer's age group reduces the error of predicting conformation classes 2 and 3 knowledge respectively.

5.2.3.1.1.4 HYPOTHESIS TESTING: FARMERS' AGE AND LEVEL OF DAMAGE CLASSIFICATION KNOWLEDGE

Farmers age and level of damage classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 1 level of damage classification knowledge	.033	.417	not rejected
Class 2 level of damage classification knowledge	.052	.307	not rejected
Class 3 level of damage classification knowledge	.033	.417	not rejected

Table 5.9: Farmers' age and level of damage classification knowledge.

From the above results, it is clear that there is no statistically significant association between farmers' age and level of damage 1, 2 and 3 classification knowledge.

5.2.3.1.1.5 HYPOTHESIS TESTING: FARMERS' AGE AND SEX CLASSIFICATION KNOWLEDGE

Farmers age and sex classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 1 sex classification knowledge	.052	.307	not rejected
Class 2 sex classification knowledge	.052	.307	not rejected

Table 5.10: Farmers' age and sex classification knowledge.

From the above results, it is clear that there is no statistically significant association between farmers 'age and sex 1 and 2 classification knowledge.

5.2.3.1.1.6 HYPOTHESIS TESTING: FARMERS' EDUCATION AND LIVESTOCK AGE CLASSIFICATION KNOWLEDGE

Farmers education and age classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 1 age classification knowledge	.059	.756	not rejected
Class 2aAge classification knowledge	.125	.475	not rejected
Class 3 age classification knowledge	.079	.664	not rejected
Class 4 age classification knowledge	.093	.604	not rejected

Table 5.11: Farmers' education and age classification knowledge.

From the above statistics, it is clear that there is no relationship between farmers' education and livestock age classification knowledge for all classes.

5.2.3.1.1.7 HYPOTHESIS TESTING: FARMERS' EDUCATION AND FATNESS CLASSIFICATION KNOWLEDGE

Farmers education and fatness classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 0 fatness classification knowledge	.300	.112	not rejected
Class 3 fatness classification knowledge	.217	.227	not rejected
Class 5 fatness classification knowledge	.300	.112	not rejected

Table 5.12: Farmers' education and fatness classification knowledge.

From the above statistics, it is clear that there is no relationship between farmers' education and livestock fatness classification knowledge for classes 0, 3 and 5.

5.2.3.1.1.8 HYPOTHESIS TESTING: FARMERS' EDUCATION AND CONFORMATION CLASSIFICATION KNOWLEDGE

Farmers education and conformation classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/not rejected
Class 1 conformation classification knowledge	.300	.112	not rejected
Class 2 conformation classification knowledge	.038	.861	not rejected
Class 3 conformation classification knowledge	.038	.861	not rejected
Class 4 conformation classification knowledge	.125	.475	not rejected
Class 5 conformation classification knowledge	.300	.112	not rejected

Table 5.13: Farmers' education and conformation classification knowledge.

From the above statistics, it is clear that generally, there is association between farmers' education and conformation classification knowledge for all classes.

5.2.3.1.1.9 HYPOTHESIS TESTING: FARMERS' EDUCATION AND LEVEL OF DAMAGE CLASSIFICATION KNOWLEDGE

Farmers education and damage classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/not rejected
Class 1 damage classification knowledge	.125	.475	not rejected
Class 2 damage classification knowledge	.093	.604	not rejected
Class 3 damage classification knowledge	.125	.475	not rejected

Table 5.14: Farmers' education and damage classification knowledge.

From the above statistics, it can be generally concluded that there is no association between farmers' education and level of damage classification knowledge for all classes.

5.2.3.1.1.10 HYPOTHESIS TESTING: FARMERS' EDUCATION AND SEX CLASSIFICATION KNOWLEDGE

Farmers education and sex classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected
Class 1 sex classification knowledge	.741	.002	rejected
Class 2 sex classification knowledge	.741	.002	rejected

Table 5.15: Farmers' education and sex classification knowledge.

A statistically significant association (p-value .002) exists at the 10% level of significance between Age and classes 1 and 2 sex classification knowledge. What this means in practical context is that educational levels of farmers does play a role in terms of whether they are able to classify livestock according to whether they are castrated or not.

5.2.3.1.1.11 HYPOTHESIS TESTING: CATTLE OWNERS AND AGE CLASSIFICATION KNOWLEDGE.

Cattle owners and age classification knowledge	Goodman and Kruskal Tau value	Approximate significance (p-value)	all hypothesis rejected/ not rejected significance
Class A Age classification knowledge	.028	.788	Not rejected

Table 5.16: Cattle owners and Age classification knowledge.

From the above results, it can be concluded that there is no association between being a cattle owner and Class A age classification knowledge

5.2.3.1.1.12 HYPOTHESIS TESTING FOR THE FOLLOWING VARIABLES:

Variables	Goodman and Kruskal Tau value	Approximate significance (p-value)	Null hypothesis rejected/ not rejected significance
Farmers' sex 1 classification knowledge and Sex as an important determinant of price	.110	.086	Rejected
Farmers' Sex 2 classification knowledge and Sex as an important determinant of price	.110	.086	Rejected
Class A age classification knowledge and Age as an important determinant of price	.139	.040	rejected

Table 5.17: Rest of the variables.

From the above results, it can be concluded that:

- a statistically significant association (p-value of .086) exists at the 10% level of significance between sex 1 classification knowledge and sex as an important determinant of price. What this means in a practical context is that farmers regard their sex class 1 classification knowledge assists in price determination
- a statistically significant association (p-value of .086) exists at the 10% level of significance between sex 2 classification knowledge and sex as an important determinant of price. What this means in a practical context is that farmers regard their sex class 1 classification knowledge assists in price determination;
- there is a statistical significant association (p-value .040) exists at the 10% level of significance between class A classification knowledge and age as a determinant price. What this means in a practical context is that farmers regard their class A age classification knowledge assists in how they perceived age as important in price determination

5.3 SECONDARY OBJECTIVES

The following section focuses on the results addressing the secondary objectives of the study. The results emanate from the primary research conducted with the livestock buyers, other stakeholders in the livestock industry and smallholder farmers residing at Moretele of the North West Province.

5.3.1 TO DETERMINE THE DEMOGRAPHIC PROFILE OF THE SMALLHOLDER LIVESTOCK FARMER AND ACCESS TO COMMUNICATION MEDIA

All respondents to the study were male and elderly as explained in 5.2.3.1.1.3 above. From the study, it is clear that livestock farming in the area is dominated by males, as there were no women represented in the study.

The official population figure for the Moretele Local Municipality according to Statistics South Africa (Community Survey: 2007), was 181 038. At the same time, the official black African population of South Africa was 20 368 105 (51% of the total African black population, Statistics South Africa. (2010). The proportion of the black female representation, it is assumed, is also reflected in the population of Moretele, where more than half of the total population should be black females. Despite the population representation, not one member of the smallholder farmers who were members of NERPO that were interviewed in this study was a female.

Again, results emanating from the study indicate that irrespective of their educational background and status in society, farmers that were interviewed had little information on livestock buyer requirements. It was clear that these farmers also needed to be capacitated such that knowledge on buyer requirements is increased.

5.3.2 TO DETERMINE THE QUALITY OF MARKETING INFORMATION RESOURCES CURRENTLY AVAILABLE TO THE SMALLHOLDER FARMER

The quality of marketing information resources currently available to the smallholder farmer from the livestock auctioneering industry is very accurate. The farmers seem to be satisfied with the accuracy of the information. However, this limited source of information also impacts when making informed choices in the marketing of livestock. The ideal situation would be for the livestock farmer to have much more than one source of marketing information, including information from the abattoir industry such that alternatives of the best deals for livestock could be explored.

5.3.3 TO DETERMINE THE ROLE OF SUPPORT INSTITUTIONS IN FACILITATING MARKETING INFORMATION FOR THE SMALLHOLDER LIVESTOCK FARMER

When asked to indicate the roles played by NERPO, government and other support institutions to facilitate market access for the livestock farmers (Question 25 of the farmer questionnaire), the response was as illustrated below;

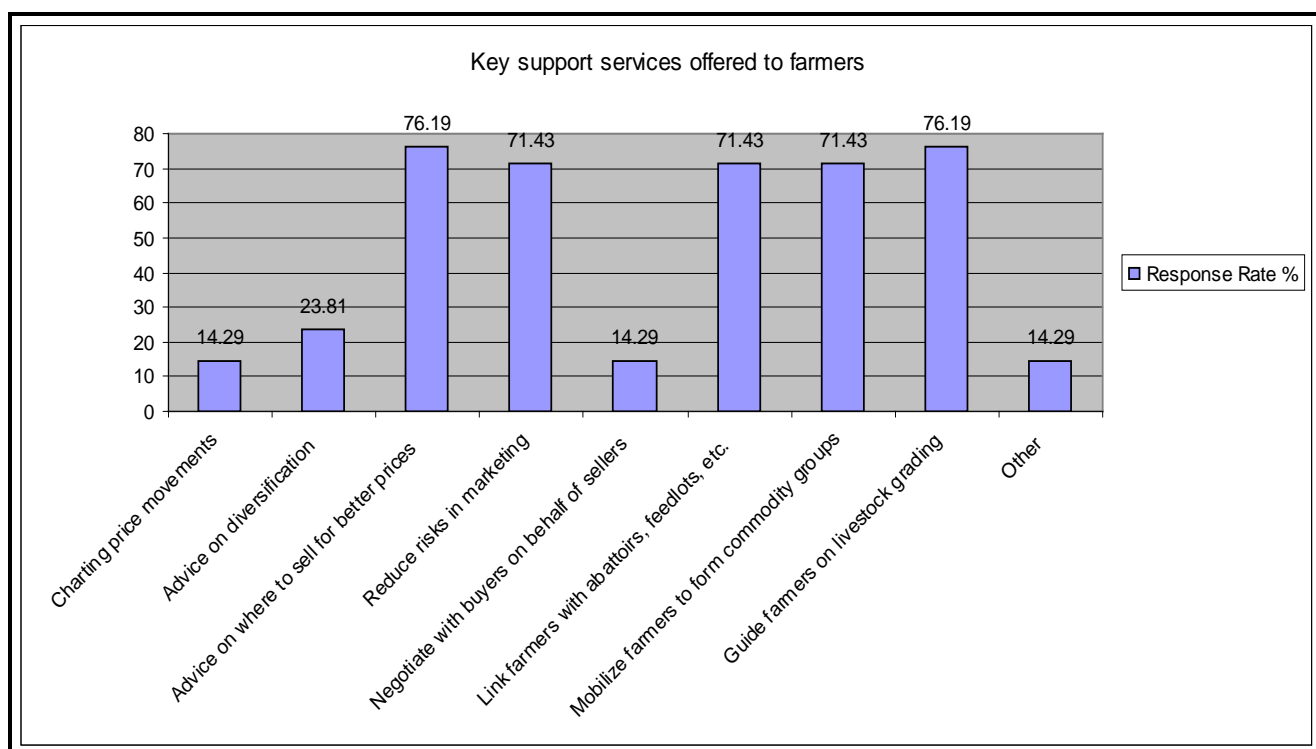


Figure 5.19 Key support services offered to farmers.

From the above figure, it is clear that the support institutions including NERPO play the most important activities in linking farmers with the auctioneering industry, advice on where to sell and mobilising farmers to form commodity groups. There is still a gap in charting price movements and the actual negotiations with buyers on behalf of farmers.

5.3.4 TO PUT FORWARD RECOMMENDATIONS THAT WILL ENHANCE MARKETING INFORMATION ACCESS BY SMALLHOLDER LIVESTOCK FARMERS IN MORETELE

Before recommendations to enhance marketing information access by smallholder, it is also useful to consider perceived constraints articulated by the smallholder farmers, buyers and other stakeholders respectively

- Farmers' perceived market access constraints

When asked to explain their perception of constraints to market access, (Question 26 of the questionnaire); the response was as illustrated in the figure below (Figure 5.20):

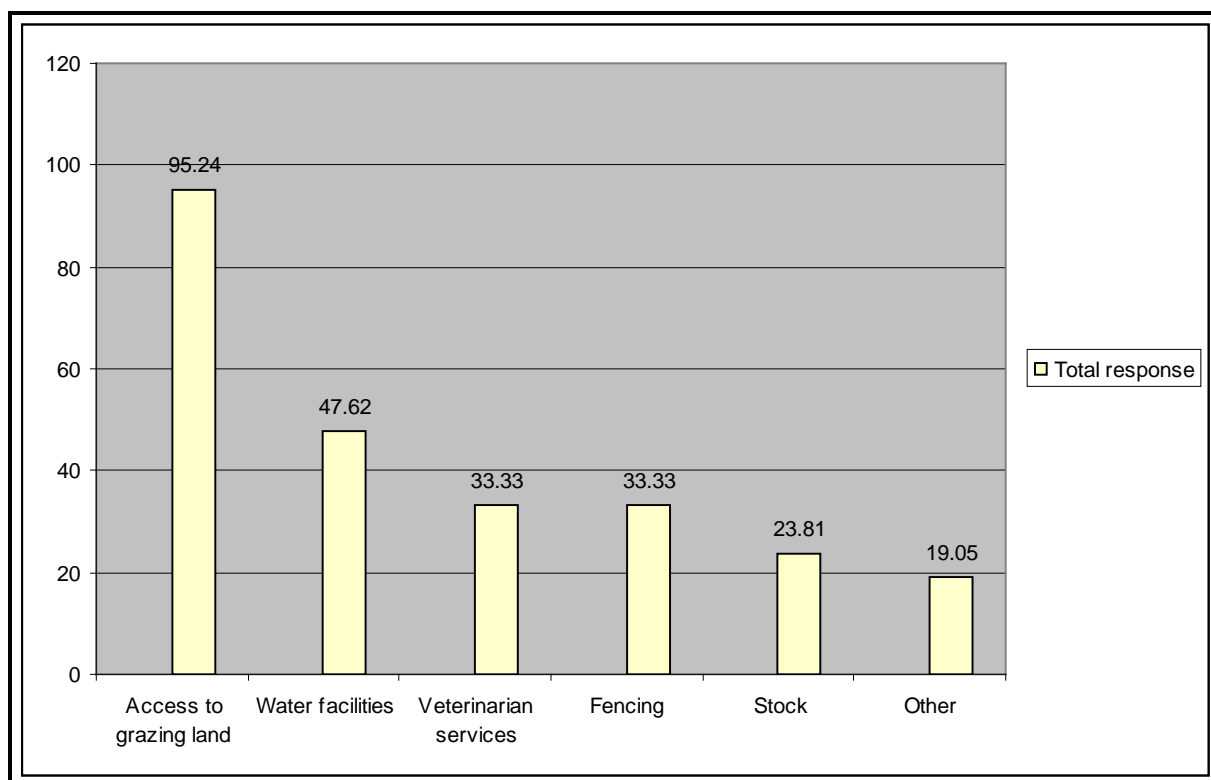


Figure 5: 20 Farmer perceptions of major constraints to markets.

Interestingly 95.24% of the farmers indicated that inadequate access to grazing land prevented breeding of good quality livestock and therefore poses as a key constraint to market access. Inadequate access to other amenities like water, fencing and veterinarian services were also mentioned as constraints to market access, as these affect the quality of livestock.

- Perceived market access constraints by buyers

Section F (Question 16) of the buyer questionnaire focused on buyers' perception of smallholder farmers' constraints to effective participation.

Key livestock buyers, i.e. SAFLA & MB, SAFA, RMAA and SANCU indicated that the general constraints preventing smallholder livestock buyers from effective participation was lack of understanding of buyer requirements. They mentioned culture of keeping animals until they are too old had to be changed completely as the older the animal the less valuable it is to the buyer.

- Perceived market access constraints by other stakeholders

As mentioned in 5.2.4 above, the view that smallholder livestock farmers have a real challenge in understanding livestock market requirements came out very strongly. Most black livestock farmers did not realise that age, fatness, conformation, and level of damage are all key determinants of price.

Recommendations that will enhance marketing information access by smallholder livestock farmers in Moretele will be fully discussed in the following chapter:

5.3.5 TO IDENTIFY FURTHER AREAS OF RESEARCH ON THE PLIGHT OF SMALLHOLDER FARMERS IN SOUTH AFRICA

The absence of women in the smallholder livestock sector needs to be addressed as a matter of urgency. Gaps in knowledge of market requirements in the smallholder livestock sector needs to be addressed to ensure effective participation. The role that smallholder livestock

farmer can play in the further development of the industry cannot be undermined. Specific further areas of research that are recommended will be fully addressed in the next concluding chapter.

5.4 CONCLUSION

This section of the study which focused on the primary objective revealed a lot of important issues still to be addressed by support institutions including government in its efforts to enhance more meaningful participation of smallholder livestock farmers in mainstream markets. One important revelation is that buyers of livestock are very clear on their product requirements, price determination, marketing channels available in the industry and promotional tolls they respond to, when buying livestock.

On the other hand, the study revealed the smallholder sector's inability to meet livestock market requirements on age, fatness, conformation and level of damage classification knowledge. These farmers have little or no knowledge of livestock and quality relationships, alternative marketing channels available in the industry and various promotional tools that could be used to promote their livestock.

Due to this lack of information these farmers are not in any position to understand mainstream livestock buyer requirements.

On the measure of association, statistically significant association at the 10% level of significance was established only between the following variables:

- Class 1 age classification knowledge and age as an important determinant of price
- Farmers' education and classes 1 and 2 sex classification knowledge

- Sex Classification 1 and 2 classification knowledge and sex as an important determinant of price
- Class A knowledge classification and sex as an important determinant of price information
- Age and conformation classes 2 and 3.

Of more importance, the statistical analysis revealed a very important factor that age and educational background does not have any statistically significant relationship with the level of critical knowledge required, except for education and sex class 1 and 2 classification knowledge where a significant relationship exists.

There is lack of participation by women in the smallholder livestock sector, this state of affairs needs to be addressed as a matter of urgency.

As outlined in Chapter 1 of this dissertation, focus of the following chapter, Chapter 6, will be on the detailed interpretation of the research findings. Recommendations to address the marketing information gaps that were identified will be forwarded. The recommendations will clearly articulate interventions that need to be put in place to enhance the capacity of black livestock farmers, who are members of NERPO residing in Moretele in the marketing of their livestock. Non representation of women and their future role in the emerging livestock industry need to be addressed. Chapter 6 will also give more detail on further areas that need to be researched.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The last chapter of this dissertation will revisit the objectives of the study and the methodology used to obtain data. Findings from the research will be interpreted, conclusions and recommendations to address challenges that were highlighted in the research, will also be made. In addition suggestions for future research, to address the limitations encountered in this research will be made.

6.2 OBJECTIVES OF THE STUDY

As outlined in Chapter 1 of this dissertation, the primary objective of the study was to conduct an investigation into the gap of knowledge in marketing information needs of smallholder livestock farmers in the Moretele area in the Bojanala Platinum District Municipality of the North West Province. The secondary objectives that flow from the primary objective were:

- to determine the impact of the demographic profile of farmers and access to communication media
- to determine the quality of marketing information resources currently available to the smallholder farmer
- to determine the role of support institutions in facilitating marketing information for the smallholder livestock farmer
- to put forward recommendations that will enhance marketing information access by smallholder livestock farmers in Moretele.
- to identify further areas of research on the plight of smallholder farmers in South Africa.

The interviews were conducted in both English and African languages. The research findings are divided into two sections which were the descriptive and inferential statistical analysis.

6.3 LIMITATIONS OF THE STUDY

The research was limited to only twenty one (21) respondents, who were all members of NERPO. As explained in Chapter 5, the response rate was very good, as 88% of the total number of NERPO members, located in the Moretele area in the Bojanala Platinum District Municipality of the North West Province participated. It could have been that if a larger number of respondents were interviewed, different responses could have been obtained. However, the research results do, to a large extent, reflect the extent of lack of knowledge on marketing information within the smallholder livestock sector in the whole country.

With respect to livestock buyers, eight (8) from the targeted list of eleven (11) were interviewed. The response rate was 73% which was good.

All eight (8) stakeholders that were targeted to be interviewed were interviewed. The interviews conducted with the other stakeholders was informal where a general question on perceived constraints preventing effective participation by livestock farmers in mainstream marketing activities was asked.

6.4 CONCLUSION OF THE STUDY

The following sections will briefly outline the general conclusions emanating from the study:

6.4.1

DEMOGRAPHIC PROFILE OF FARMERS

The general demographic profile of the respondents was a black elderly male population, with a post-matric educational qualification. No women or youth were represented in the study. Most respondents were retired teachers who embarked on livestock farming on a full-time basis. Corpographic results from the population study are described below:

The majority of respondents, (85.71%), were sole owners of their businesses, the rest were partnerships and a cooperative at 9.53% and 4.76% respectively. Most of the respondents (76.19%) were 56 years and older, 23.81% were between the ages 35 and 55 and none were less than 35 years.

The majority of the farmers were well-educated with post-matric qualifications (57.14%). Of the other respondents, 9.52% had Grade 1-5, 14.29% had Grade 6-10, and 19.05% had Grade 11-12 respectively.

In terms of livestock ownership, 95.24% of the respondents were cattle owners. Only a few owned goats and sheep at 19.05% and 4.76% respectively.

6.4.2

GAPS IN KNOWLEDGE OF LIVESTOCK CLASSIFICATION CHARACTERISTICS/ BUYERS REQUIREMENTS

The following tables illustrate gaps in knowledge of livestock classification characteristics or buyers' requirements which are age, fatness, confirmation, level of damage and sex respectively:

Livestock characteristics/ Buyers requirements – age	Farmers' knowledge (%)	Knowledge gap (%)
A	71.43	-28.57
AB	14.29	-85.71
B	9.52	-90.48
C	42.86	-57.14

Table 6.1: Knowledge gap in age characteristics.

Livestock characteristics/Buyers requirements – fatness	Farmers' knowledge (%)	Knowledge gap (%)
0	4.76	-95.24
1	0	-100.00
2	0	-100.00
3	9.52	-90.48
4	0	-100.00
5	4.76	-95.24
6	0	-100.00

Table 6.2: Knowledge gap in fatness characteristics.

Livestock characteristics/Buyers requirements – conformation	Farmers' knowledge (%)	Knowledge gap (%)
1	4.76	-95.24
2	4.76	-95.24
3	4.76	-95.24
4	9.52	-90.48
5	4.76	-95.24

Table 6.3: Knowledge gap in conformation characteristics.

Livestock characteristics/Buyers requirements -level of damage	Farmers' knowledge (%)	Knowledge gap (%)
1	9.52	-90.48
2	14.29	-85.71
3	9.52	-90.48

Table 6.4: Knowledge gap in level of damage characteristics.

Livestock characteristics/ Buyers requirements -sex	Farmers' knowledge (%)	Knowledge gap (%)
Castrated	85.71	-14.29
Not castrated	85.71	-14.29

Table 6.5: Knowledge gap in sex characteristics.

A conclusion can be made that, except for sex classification, there is a huge gap of knowledge amongst members of the study group in understanding livestock classification characteristics.

6.4.3

GAP IN KNOWLEDGE OF SOURCES OF PRICE INFORMATION

When asked about their current sources of livestock price and marketing related information, the farmers responded as follows: the most important source of livestock price and marketing related information is the livestock auctioneering industry (95.24%). the other important sources are government officials and fellow villagers, friends and relatives with 52.57% and 42.88% respectively. This result is not surprising as the auctioneering industry is the most important channel for marketing livestock for these farmers.

On the other hand, it was established that buyers' sources of livestock marketing information differed from organisation to organisation. As expected, RMAA indicated that the sources of livestock price information is the abattoir industry, SANCU was radio and print media, SAFLA-MB was the abattoir, feedlot and auctioneering industries as well as local livestock agents. Though the information gap cannot be quantified, it was clear that farmers mainly used one source of price information. Government officials seem to be the second most important source of information after the auctioneering industry. They were thus not aware of other alternative sources. It can therefore be concluded that because of the limited sources of price information, these farmers would not be able to optimize prices as they do not have access to all available sources.

On the perception of the most influential livestock characteristics on price the study group responded as follows; age was regarded as the most important determinant of price as indicated by 85.72% of respondents. It is understandable why these farmers rank age as very important as they sell their animals young through one marketing channel, which is the livestock auctioneering industry. Level of damage was pitched at 47.62% and conformation at 38.1% respectively.

On the other hand, when buyers were asked to indicate the important livestock characteristics that are important in price determination, the response was as follows; age, level of damage, fatness, and conformation were considered all important at 100%, in price determination. This response varies from the views expressed by the farmers and indicates a gap in the expectations expressed by these two groups.

Whilst the farmers were looking at one aspect of livestock classification, buyers were looking at a whole range of aspects all of which are important to them for the price that is determined for the livestock. Again, this points to a disadvantageous position the farmer finds himself in as he is not aware of the full range of variables that influence the price determination process.

There was agreement amongst the respondents and buyers of livestock on the general influences on livestock prices. These were first, the quality of livestock and then supply and demand of livestock.

On the whole, these farmers did not understand that all livestock characteristics are very important in price determination.

6.4.4 GAP IN KNOWLEDGE OF ALTERNATIVE MARKETING CHANNELS AVAILABLE IN THE INDUSTRY

The channels of distribution: producer-feedlot-processing plant-wholesale/retailer; producer-consumer; producer-feedlot-abattoir-wholesale/retailer-consumer were the most popular, at 80.95%, 71.43%, and 66.67% respectively. There was however, great reservation about using the producer-consumer channel as low prices were fetched when selling livestock locally. Local consumers only look at the size and fatness of the livestock and nothing else, whereas, age is one of the most important determinants of price especially when selling through

the livestock auctions. On the other hand, the major buyers of livestock and carcasses indicated that they used the various channels of distribution.

Farmers were not aware of the abattoir industry, (100%), as a very important distribution channel. On further probing, it was ascertained that there was little information about the abattoir industry and how prices are determined in that industry. A further explanation given was that there are known abattoirs within the vicinity, but little is known on how these organisations operate and it was stated that there is no transparency on how prices are determined.

On the whole, there is a huge gap among farmers in understanding alternative marketing channels available in the industry.

6.4.5 GAP IN KNOWLEDGE OF PROMOTIONAL TOOLS

Livestock promotional tools	Farmers' knowledge (%)	Knowledge gap (%)
Personal selling	100	0
Advertising	21.74	-78.26
Promotions and demonstrations	9.52	-90.48
Free publicity	4.76	-95.24

Table 6.6: knowledge gap of promotional tools.

Results emanating from this part of the research indicate that the livestock farmers have little or no knowledge of what livestock markets require. This is mainly a result of the farmers' lack of knowledge on how the livestock industry works. These farmers have no knowledge on how livestock and carcasses are classified, they do not understand how prices are determined, they are not aware of various distribution channels available and have no idea of what tools to use to promote their livestock. Due to this lack of information these farmers are not in any position to understand all mainstream livestock buyer requirements.

Statistical analysis was performed to determine if statistical significant associations exist between identified variables. Statistically significant association at the 10% level of significance was established only between the following variables:

- class 1 age classification knowledge and age as an important determinant of price
- farmers' education and classes 1 and 2 sex classification knowledge
- sex Classification 1 and 2 classification knowledge and sex as an important determinant of price
- class A knowledge classification and sex as an important determinant of price information
- age and conformation classes 2 and 3.

Of more importance, the statistical analysis revealed a very important factor, namely that age and educational background does not have any statistically significant relationship with the level of critical knowledge needed in the livestock industry.

6.4.6 ATTAINMENT OF SECONDARY OBJECTIVES OF THE STUDY

The secondary objectives of the study and how it was attained will be discussed below;

6.4.6.1 THE DEMOGRAPHIC PROFILE OF THE SMALLHOLDER LIVESTOCK FARMER AND ACCESS TO COMMUNICATION MEDIA

As mentioned above the study group consisted mainly of a black elderly male population, with a post-matric educational qualification. Despite the population representation, not one member of the smallholder farmers who were members of NERPO that were interviewed in this study was a female.

It also seemed, however, that irrespective of the educational background and status, farmers that were interviewed had little information on livestock buyer requirements. There was no difference in the communication media used by the farmers, all relied on the auctioneering industry, government officials and word of mouth for market-related information.

6.4.6.2 THE QUALITY OF MARKETING INFORMATION RESOURCES CURRENTLY AVAILABLE TO THE SMALLHOLDER FARMER

The quality of marketing information resources currently available to the smallholder farmer from the auctioneering industry is very accurate. However, this limited source of information also impacts when making informed choices in the marketing of livestock. Farmers do not have access to other alternative sources of market information. For example, they do not know how prices are determined in the abattoir and other key livestock industries.

6.4.6.3 THE ROLE OF SUPPORT INSTITUTIONS IN FACILITATING MARKETING INFORMATION FOR THE SMALLHOLDER LIVESTOCK FARMER

When asked to indicate the roles played by support institutions including NERPO, government and other support institutions to facilitate

market access for the livestock farmers, the response was as follows: it was clear that the support institutions play a very important role in linking farmers with industry, giving advice on where to sell and mobilising farmers to form commodity groups. There is, however, still a gap in giving advice on price movements, diversification and negotiations with buyers on behalf of farmers.

6.4.6.4 RECOMMENDATIONS THAT WILL ENHANCE MARKETING INFORMATION ACCESS BY SMALLHOLDER LIVESTOCK FARMERS IN MORETELE

The following recommendations are made to address the gaps in knowledge prevalent among the livestock farmers living in Moretele and beyond.

6.4.6.4.1 CAPACITY BUILDING TO ENHANCE KNOWLEDGE ON LIVESTOCK AGE CLASSIFICATION

The capacity of the study group's understanding of livestock age classification requirements need to be enhanced, as a matter of urgency. One practical solution would be to expose and link the farmers with various buyers operating in the Moretele area so that industry requirements are addressed in a practical manner. Preferential procurement can only happen when these farmers are able to meet the buyers' requirements. In addition, incentives need to be given to buyers to encourage training and capacity building amongst the smallholder farmers.

A more practical way of disseminating information is needed regarding distributing the age classification-related information. This would mean using the organised farmers' days to disseminate the information. Another alternative is also to make the relevant information available in the Department of Agriculture, Fisheries and Forestry's Agricultural

Marketing Information System. The Directorate; Marketing is concluding the process of making this information available on its website whose address is <http://webapps.daff.gov.za/amis>.

Also, for a long time, the smallholder agriculture sector has been production oriented. The production and marketing of livestock in a commercial manner is a business science that needs a thorough understanding of business principles, which unfortunately is still missing. There is a huge gap in agricultural marketing knowledge in general, and livestock marketing in particular. Coordinated training on livestock age classification targeting government extension officers, is also needed as a matter of urgency.

6.4.6.4.2 CAPACITY BUILDING TO ENHANCE UNDERSTANDING OF LIVESTOCK PRICE DETERMINATION

An implication of the results means that there is a huge gap of knowledge in this area and steps should be taken by key players including government and industry associations and buyers of livestock to educate these farmers regarding the fine science of pricing and the variables influencing the determination of price.

Farmers in the study, only depended on their interaction with the auctioneering industry to determine prices for their livestock, abattoirs and feedlots are not well-known. This very point raised by the smallholder farmers indicates the need to indicate how, amongst others, prices are determined in the abattoir and other industries. It is recommended that these buyers also be used in future as sources of price information to enhance better marketing decisions. It is recommended that farmers be exposed to all the alternative distribution channels and be linked through a mentorship model to access information with relevant role players in each channel.

It is also interesting to note that the cellphone technology is now increasingly becoming a very important communication tool for farmers in other commodity sectors, to disseminate price information. This technology's impact is, however, still very insignificant in the livestock industry. Use of this technology, especially among smallholder livestock farmers, to disseminate price-related information should be encouraged.

6.4.6.4.3 CAPACITY BUILDING TO INCREASE KNOWLEDGE ON ALTERNATIVE MARKETING CHANNELS

The farmers in the study group focus on limited channels, namely the auctioneering and local markets, they have no idea what other channels are available in the industry. Abattoir, meat processing organisations and feedlots should all be involved in educating smallholder farmers on their market requirements. By increasing their participation in other alternative marketing channels, the smallholder sector will participate more effectively in these mainstream markets.

6.4.6.4.4 UTILISATION OF PROMOTIONAL TOOLS TO ADVERTISE LIVESTOCK

The levels of lack of knowledge on promotional tools, among the study are very high, as previously discussed. These farmers need to find innovative and creative ways to promote their livestock. Lessons could be drawn from established farmers. Mutually beneficial arrangements are possible where livestock from smallholder and established sectors are jointly promoted and information sharing in this area should also be encouraged.

6.4.6.4.5 ADDRESSING LACK OF ADEQUATE RESOURCES

Farmers have mentioned that limited access to grazing land, veterinarian services, water and adequate infrastructure are constraints to their effective participation to mainstream livestock marketing activities. These issues are well documented, the challenge is on making strategies and allocated resources work, to address these constraints. There is a need for government and other stakeholders to refine its comprehensive support offered to these farmers such that the impact is realised. Better communication, monitoring of expenditure of scarce resources and creation of good partnerships between all stakeholders is essential.

It would seem that NERPO is not providing all the required services that the farmers need. It is recommended that NERPO re-evaluate their current business model and start asking farmers what they need from the organisation. Only by getting information from farmers and fulfilling their needs will NERPO be able to contribute to the success of the smallholder livestock industry.

6.4.6.4.6 GENERAL RECOMMENDATION OF MORE FEMALE REPRESENTATION

There is a serious gap in representation of females and youth in emerging livestock sector in Moretele and by assumption in the rest of the country. Government and other stakeholders in the industry must make an intervention that will level the playing field in future such that all sectors of the economy are well represented in this sector.

6.4.6.5 RECOMMENDED AREAS FOR FURTHER RESEARCH ON THE PLIGHT OF SMALLHOLDER LIVESTOCK FARMERS IN SOUTH AFRICA

This study, has for the first time, outlined in detail the specific gaps of knowledge in marketing information that are prevalent in the smallholder livestock sector in Moretele. It can be assumed that this state of affairs is representative of challenges confronting the smallholder livestock sector in South Africa. It is therefore recommended that research in future should focus on the following areas:

- a detailed analysis of reasons for gaps in knowledge of marketing information on livestock characteristics that are prevalent in the smallholder livestock sector
- the influence of culture where livestock farming is not regarded as an economic venture but rather as a symbol of wealth should be examined
- closely related to the above, an understanding how smallholder livestock farmers develop their product/price relationships and strategies, with the intention to change their traditional mindset
- smallholder livestock farmers' lack of involvement in the abattoir industry would be another very interesting study. Constraints preventing participation should be addressed in the study
- the impact of access to adequate grazing land, veterinarian services, water, infrastructure and other related resources, to effective participation of livestock farmers also need to be examined. However, only farmers who have a passion and a

justified potential to grow in the industry should be further supported

- a very important aspect that needs further research is why there is no female representation in smallholder livestock industry in Moretele and the rest of the country. A conscious deliberate intervention needs to be made, in the facilitation of better female participation in the industry.

6.5

SUMMARY

This study revealed a lot of important issues still to be addressed by support institutions including government in its efforts to enhance more meaningful participation of smallholder livestock farmers in mainstream markets. One important revelation is that smallholder sector's inability to meet livestock market requirements including age, fatness, conformation and level of damage classification knowledge. These farmers have little or no knowledge of price and quality relationships, alternative marketing channels available in the industry and various promotional tools that could be used to promote their livestock.

Resources and support should only be given to those farmers with potential to grow, more females and the youth need to enter this market. It must be stated that the South African meat industry forms an integral part of the supply of animal; protein to the average South Africa. It is therefore imperative that this industry be encouraged to grow and succeed. The smallholder farmers are an integral part of the supply of red meat to the market in South Africa and must therefore be helped to reach its full potential so as to improve the quality of life of all South Africans.

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ANNEXURE A

QUESTIONNAIRE: LIVESTOCK BUYERS INFORMATION

INSTRUCTIONS

- 1) Please answer the following questions by ticking (✓) **ONLY** on the relevant block.
- 2) Please write answers in spaces provided where applicable.

Section A: Background information

This section refers to the background information about the livestock buyer organisation. Please give full information.

1. Please give the name of your organisation

.....

2. Telephone number/s of contact person

.....

3. Fax number of contact person

.....

4. E-mail address of contact person

.....

Section B: Livestock classification-related information

This section of the questionnaire relates to the buyer organisation's specific requirements when purchasing livestock (beef, sheep and goat).

1. Please indicate, by ticking the relevant box (✓), which age classification/s meet your livestock specific requirements:

Age	Class	Buyer specific requirements
Under 2yrs old (0 permanent teeth)	A	
2 – 2½ yrs old (1-2 permanent teeth)	AB	
2½ -3 yrs old (3-6 permanent teeth)	B	
3 yrs and older (6+permanent teeth)	C	

2. Please indicate, by ticking the relevant box (✓), which fatness classification/s meet your livestock specific requirements:

Fatness	Class	Buyer specific requirements
No fat	0	
Very lean	1	
Lean	2	
Medium	3	
Fat	4	
Slightly over fat	5	
Excessively over fat	6	

3. Please indicate, by ticking the relevant box (✓), which conformation classification/s meet your livestock specific requirements:

Conformation	Class	Buyer specific requirements
Very flat	1	
Flat	2	
Medium	3	
Round	4	
Very round	5	

4. Please indicate, by ticking the relevant box (✓), which damage classification/s meet your livestock specific requirements:

Damage	Class	Buyer specific requirements
Slight	1	
Moderate	2	
Severe	3	

5. Please indicate, by ticking the relevant box (✓), the sex classification that meets your livestock specific requirements:

Sex	Class	Buyer specific requirements
Castrated	1	
Not castrated	2	

Section C: Current marketing information sources and price-related information

This section of the questionnaire relates to the organisation's current sources of livestock marketing information and the perception of influences on livestock prices.

Subsection C 1

This subsection relates to the organisation's current sources of livestock marketing information:

6. What are the current sources of information that you use to reach decisions regarding the marketing of your livestock? Please indicate, by ticking the relevant box/es (✓).

Current sources of livestock marketing information	Response
Abattoir industry	
Feedlot industry	
Livestock auctioneering industry	
SAMIC	
Internet	
Print media (newspapers, industry magazine etc)	
Government officials	
Local livestock agents	
Other farmers	
Radio	
Cell phone	
Television	
Other (specify)	

Subsection C 2

This subsection of the questionnaire relates to the farmer's perception of influences of price information:

7. How important is each of the following livestock classification characteristics when deciding on the price you are prepared to pay for livestock?

Please indicate, by ticking the relevant box (✓), your answer using the following 4 point scale where:

- 1= Very important
2 = Important
3= Less important
4= Unimportant

Classification Characteristic	1. Very important	2. Important	3. Totally unimportant	Unimportant
Sex				
Age				
Level of damage				
Fatness				
Conformation				

8. According to your perception, please allocate, by ticking the relevant box (✓), a rank of 1 to the most important influence on livestock prices. A rank of 2 to the next important influence, etc. Allocate a rank of 4 to the least important influence for livestock prices:

Use each of the numbers 1-4 only once

Influence on price formation	Rank
Quality of livestock	
Supply and demand	
Imports of red meat	
Availability and price of maize	

Section D: Livestock distribution channels

This section explores the **major** local channels of distribution used by livestock buyers.

9. Please tick the relevant livestock channel/s of distribution used by your organisation:

Livestock distribution channels	Response
Producer-----Speculator -----Feedlot-----Abattoir-----Wholesale/Retail----Consumer	
Producer-----Feedlot-----Abattoir-----Wholesale/Retail-----Consumer	
Producer-----Feedlot-----Processing plant-----Wholesale/Retail----Consumer	
Producer-----Abattoir-----Processing plant-----Wholesaler/Retail----Consumer	
Producer ----Consumer	
Producer-----Butchery-----consumer	
Producer-----Abattoir-----Wholesale/Retail-----Consumer	
Other (specify)	

Section E: Livestock promotional tools

This section relates to the tools used to communicate information to buyers of livestock.

10. Please indicate, by ticking the relevant box/es, the promotional tool/s used to communicate livestock information to your organisation:

Promotional tool	Response
Personal selling	
Advertising through mass media	
Promotions and demonstrations	
Free publicity	
Other (specify)	

Section F: General

11. Please explain your perception of problems preventing the black farmers' participation in mainstream livestock markets

.....

.....

.....

.....

Thank you for your cooperation in completing the questionnaire.

ANNEXURE B

QUESTIONNAIRE: LIVESTOCK FARMER INFORMATION

INSTRUCTIONS

- 3) Please answer the following questions by ticking (✓) **ONLY** on the relevant block.
- 4) Please write answers in spaces provided where applicable.

Section A: Background information

This section refers to the background and demographic information about the livestock farmer/ farming organisation. Please give full information.

1. Name of farmer/ farmer organisation

.....

2. Physical address of farmer organisation

.....

3. Telephone number/s of farmer/organisation

.....

4. Fax number of farmer/organisation

.....

5. E-mail address

.....

6. Please indicate your race by ticking (✓) inside the relevant box:

African	()
Coloured	()
Indian	()
White	()

7. Please indicate your gender by ticking (✓) inside the relevant box

Male	()
Female	()

8. Please indicate the highest education standard passed by yourself by ticking (✓) inside the relevant box

Grade 1-5	()
Grade 6-10	()
Grade 11-12	()
Higher	()

9. Please indicate the type of livestock owned by yourself by ticking (✓) inside the relevant box

Sheep	()
-------	--------

Goats ()
Cattle ()

10. Please indicate the number of livestock owned by yourself by ticking (✓) inside the relevant box

Sheep 10-49 () 50-100 () 101+ ()
Goats 10-49 () 50-100 () 101+ ()
Cattle 0-49 () 50-100 () 101+ ()

Section B: Farmers' knowledge of livestock classification-related information

This section of the questionnaire relates to the farmer's knowledge of livestock classifications:

11. Please indicate, by filling in the corresponding boxes, your knowledge of the following livestock classifications by age and the number of teeth:

Class	Age	Number of teeth
A		
AB		
B		
C		

12. Please indicate, by filling in the corresponding box, your knowledge of the following livestock fatness classifications:

Class	Fatness
0	
1	
2	
3	
4	
5	
6	

13. Please indicate, by filling in the corresponding box, your knowledge of the following livestock conformation classifications:

Class	Conformation
1	
2	
3	
4	
5	

14. Please indicate, by filling in the corresponding box, your knowledge of the following livestock damage classifications:

Class	Damage
1	
2	
3	

15. Please indicate, by filling in the corresponding box, knowledge of the following livestock sex classifications:

Class	Sex
1	
2	

Section C: Price-related information

This section of the questionnaire relates to the farmer's perception of influences and sources of information for livestock prices.

16. How important do you think each of the following livestock classification characteristics is, when deciding the price your customer is prepared to pay for your livestock?

Please indicate your answer using the following 4 point scale where:

- 1= Very important
- 2 = Important
- 3= Totally unimportant
- 4= Unimportant

Classification Characteristic	1. Very important	2. Important	3. Totally unimportant	Unimportant
Sex				
Age				
Level of damage				
Fatness				
Conformation				
Damage				

17. According to your perception, please allocate a rank of 1 to the most important influence on price formation. A rank of 2 to the next important influence, etc. Allocate a rank of 4 to the least important reason for livestock price formation:

Use each of the numbers 1-4 only once

Influence on price formation	Rank
Quality of livestock	
Supply and demand	
Imports of red meat	
Availability and price of maize	

18. Please allocate a tick (✓) in the box provided across the relevant sources of livestock prices used by your organisation:

Source of livestock prices	Response
Abattoir industry	
Feedlot industry	
Livestock auctioneering industry	
SAMIC	
Internet	
Print media (newspapers, industry magazine etc)	
Government officials	
Local livestock agents	
Radio	
Cell phone	
Television	
Other (specify)	

Section D: Livestock distribution channels

This section explores the **major** local channels of distribution used by livestock farmers

19. Please tick (✓) the relevant livestock channel/s of distribution used by your organisation:

Livestock distribution channels	Response
Producer-----Speculator -----Feedlot-----Abattoir-----Wholesale/Retail----Consumer	
Producer-----Feedlot-----Abattoir-----Wholesale/Retail----Consumer	
Producer-----Feedlot-----Processing plant-----Wholesale/Retail----Consumer	
Producer-----Abattoir-----Processing plant-----Wholesaler/Retail----Consumer	
Producer ----Consumer	
Producer-----Butchery-----consumer	
Producer-----Abattoir-----Wholesale/Retail----Consumer	
Other (specify)	

18. Which channel/s in the industry are you **not** aware of? Please indicate by ticking (✓) the relevant box/es

Livestock distribution channels	Response
Producer-----Speculator -----Feedlot-----Abattoir-----Wholesale/Retail----Consumer	
Producer-----Feedlot-----Abattoir-----Wholesale/Retail-----Consumer	
Producer-----Feedlot-----Processing plant-----Wholesale/Retail-----Consumer	
Producer-----Abattoir-----Processing plant-----Wholesaler/Retail----Consumer	
Producer ----Consumer	
Producer-----Butchery-----consumer	
Producer-----Abattoir-----Wholesale/Retail-----Consumer	
Other (specify)	

Section E: Livestock promotional tools

This section relates to the tools used to communicate information to buyers of livestock.

20. Which channel/s in the industry are you **not** aware of? Please indicate by ticking (√) the relevant box

Promotional tool	Response
Personal selling	
Advertising through mass media	
Promotions and demonstrations	
Free publicity	
Other (specify)	

Section F: General

21. Please indicate, by ticking (√) the relevant box, the role government plays in facilitating access to the livestock markets:

Activity	Response
Charting price movements	
Advise on livestock diversification for better prices	
Advice on where to sell livestock for higher prices	
Reduce risks associated with livestock marketing	
Negotiation with buyers on behalf of farmers	
Link farmers with abattoirs, feedlots, auctioneers, commodity organisations, livestock agents, etc.	
Mobilize farmers to form commodity groups for group marketing and transport	
Guide farmers on grading of livestock	

22. Do you know what role NERPO plays in facilitating access to livestock marketing information? Please comment on the general effectiveness of NERPO:

.....

.....

.....

23. please explain your perception of problems preventing the black farmers from participation in mainstream livestock markets

.....

.....

.....

Thank you for your cooperation in completing the question