ISSN 0301-603X

THE MARKETING OF LIVESTOCK ON COMMUNAL LANDS IN THE EASTERN CAPE PROVINCE: CONTRAINTS, CHALLENGES AND IMPLICATIONS FOR THE EXTENSION SERVICES[1]

L. Coetzee[2], B.D. Montshwe[3] and A. Jooste[4]

Corresponding author: Lecturer, Department of Agricultural Economics, University of the Free State, Bloemfontein.

Keywords: Livestock; marketing; communal land; Eastern Cape.

ABSTRACT

This paper identifies the constraints for livestock marketing by small-scale farmers. It further provides a new perspective on actionable strategies and implications for agricultural extension that will improve the situation. The development of an efficient livestock marketing system for the small-scale farmers by means of improved extension services and other related aspects are therefore afforded a main focus. A model for the provision of extension services that seeks to address the problem is presented. This model shows that an integrated approach is fundamental to the efficient provision of agricultural extension services which will improve, among other things, farmer productivity and efficiency through adoption and use of technology and practices. The latter is likely to underpin an efficient livestock marketing system within the small-scale livestock sector, thereby increasing possibilities for high market off-take, as well as increased profitability.

[1] *This material is based upon work supported by the National Research Foundation under Grant number 2053337. Any opinion, findings and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Research Foundation.*

[2] *Lecturer, Department of Agricultural Economics, University of the Free State, Bloemfontein.*

[3] *Postgraduate Student, Department of Agricultural Economics, University of the Free State, Bloemfontein*

[4] *Associate Professor, Department of Agricultural Economics, University of the Free State, Bloemfontein*

ISSN 0301-603X

1. INTRODUCTION

A livestock revolution that has profound implications for livelihoods of resource poor farmers and the environment in general is taking place in global agriculture (Ouma, Obare & Staal, 2003). In South Africa the situation is no different, as most of the country's natural resources are only suitable for livestock production. Livestock farming is a tradition within South African rural systems. It is therefore not a coincidence that the Integrated Sustainable Rural Development Strategy (ISRDS, 2004) identifies livestock farming as the agricultural enterprise with the most likely chance of improving household food security and addressing poverty alleviation in the small-scale communal farming areas of South Africa. This is particularly important considering that a third of livestock in the country is owned by small-scale farmers (Jooste, 2001).

The aforementioned also applies to the Eastern Cape Province, where livestock enterprise development for small-scale farmers is considered as a potential mechanism for generating income for many rural households, thereby alleviating poverty and improving the livelihoods of the rural poor (ECDALA, 2003). However, to unlock the potential contribution that this sector could make to alleviate poverty and improve the livelihoods of the rural poor in the Eastern Cape Province will necessitate the development of strategies related to market access, as well as a supportive institutional environment to ensure economic development of small-scale[5] livestock farmers.

In terms of market access, Jooste and Van Rooyen (1996) concluded that the transition of the small-scale sector towards commercial production will ultimately be determined by its access to markets. The level of risk faced by small-scale livestock farmers on communal land is very high, and Bailey, Barrett, Little and Chabari (1999) stress that the risks might be perpetually increasing. More specifically, increasing market price variability (Jooste and Alemu, 2004), climatic variability, as well as a lack of infrastructure to support asset and income diversification (Bailey Barret, Little and Chabari, 1999), were identified as major causes of limited market participation. In addition, Jooste and Van Rooyen (1996)

[5] *Small-scale livestock farmers refer to all the subsistence and emerging farmers on communal land that have a regular intention to sell animals.*

indicated the necessity of establishing of a set of new institutions and appropriate policies to guide livestock production in the various diverse socio-economic groupings in South Africa. However, almost seven years have passed since deregulation and the institution of a new political dispensation, and not much has been done to reduce the limited marketing opportunities for small-scale livestock farmers.

This paper is structured as follows: Section 2 provides an overview of livestock numbers and grazing conditions in the Eastern Cape Province. This is followed by a situation analysis of current livestock marketing and identification of marketing constraints faced by small-scale farmers. This paper attempts to provide new perspectives on the aforementioned issues, and more importantly provide actionable strategies so that the country does not find itself in the same situation in seven years time.

2. LIVESTOCK NUMBERS AND GRAZING CONDITIONS IN THE EASTERN CAPE PROVINCE

Table 1 provides livestock numbers for the Eastern Cape Province, as well as its percentage in relation to the national total herd. Sheep numbers are the highest followed by goats and cattle. From a national point of view the Province dominates goat production. Cattle and sheep comprised 13,1 and 10,6 per cent respectively of the national herd in 2002. If these categories are converted into large stock units, it is clear that cattle farming are the most important enterprise in the Province.

Table 1: Livestock numbers in communal farming areas of the Eastern Cape Province

Livestock class	Provincial herd numbers*	% of National herd**	Eastern Cape herd numbers converted to Large Stock units
Cattle	1 781 617	13.1%	1 484 680
Sheep	2 706 576	10.6%	451 096
Goats	1 832 461	76%	295 558
Total			**2 231 334**

Source: ** Eastern Cape Department of Agriculture, 2002; **NDA, 2003.*

ISSN 0301-603X

Taking into account the number of large stock units (LSU), calculated according to the Meisner, Hofmeyer, Van Rensburg, and Pienaar tables (1983), and the availability of natural grazing in the communal farming areas, it becomes evident that overgrazing is a serious problem. Moreover, the stocking rate in the communal areas is 1,56 hectares per large stock unit (i.e. 3 472 456 hectares or 87% of the communal farming area is natural grazing) (NDA, 2003), whereas Hobson (2004) suggests that the broad average carrying capacity should be about 7 hectares per large stock unit.

According to Fraser (1985), grazing resources are in a critical state as a result of gross overstocking above the sustainable ecological carrying capacity of the veld. He further indicates that the abilities of herders to respond to the constraints imposed by the communal grazing systems through improved husbandry measures are limited. De Waal (2004) contemplates that no single farmer has too many animals or surplus stock, but the net effect is rather that of too many farmers with livestock. This further compounds the stated problem.

3. LIVESTOCK MARKETING AND MARKET ACCESS IN THE EASTERN CAPE

Marketing should play a vitally important role in the process of transforming small-scale farmers into commercial producers. That is, the market is the institution that should provide the necessary incentives for farmers to increase their income. Obviously this can only take place if farmers have sufficient access to the market. Livestock markets perform four primary economic functions (Fenyes & Groenewald, 1985). These are acting as centres for collection and local exchange of produce, providing services, acting as distribution points for goods imported from other areas and bulking points for goods to be exported from the production area. According to Fraser (1992), a demand for services provided by the marketing system is created as productivity improves and as more specialization in terms of farming systems takes place. This, in turn, will stimulate rural economic activities and improve household income.

Ainslie, Kepe, Ntsebeza, Ntshona and Turner (2002) found that the number of livestock marketed from the small-scale sector of the Eastern Cape Province is well under 10 per cent of the total herd. This is very

low compared to the commercial sector that, according to Jooste (1996), ranges between 23 and 25 per cent of the total herd. The fact that the market off-take rate in the small-scale sector is so low is due to several reasons, of which some are related to cultural values and poor production practises rather than market failures.

The reasons why small-scale farmers keep livestock are among the reasons Ainslie *et al* (2002) lists as influencing livestock sales. Livestock farming, particularly cattle, plays a vitally important role in rural systems and economic growth and it also has a strong human dimension (Birner, 1999 and Kumar, Chander & Harbola, 2000). According to Fidzani (1993), Schwalbach, Groenewald & Marfo (2001), Rocha, Starkey & Dionisio (1991) and King (1985), cattle are a source and store of wealth. Livestock constitute a hedge against inflation and it is easily converted into cash (Nell, 1998 and Moorosi, 1999). Cattle also serve as means of insurance against unforeseen occurrences such as funerals. Keeping livestock is related to both consumption and production of livestock and livestock products. A lack of marketing facilities further imposes a serious constraint on the marketing of livestock (Fletcher, 1965). This explains the poor response of constant livestock supplies to existing market outlets by small-scale farmers on communal lands (USAID, 2003). One can, however, also argue that infrastructure development should rather be the result of marketable surpluses for which there is a demand. This leaves one with an interesting dilemma, i.e. investments in infrastructure should obviously show economic returns over the long run, but such potential benefits could be obscured by factors (e.g. improving the production output through proper and relevant extension and the actual realization thereof) that are not considered in typical cost-benefit analyses usually associated with infrastructure development decisions. Cognisance should also be taken that previous infrastructure developments did not realize its full potential purely because it was not supported by proper supportive studies and changes in the policy environment (see Jooste, 1996). On the other hand, changes in rural systems, the new political environment and a "free" market system require infrastructure development on a large scale; an issue that needs further investigation.

USAID (2003) revealed that farmers in the Eastern Cape sell their animals in the following ways:

3.1 Informal markets

Livestock, especially oxen and small stock, are sold through an informal market in rural areas. These types of markets are characterized by a high degree of seasonality, poor market information pertaining to prices and quality required. Despite all the pitfalls, Nkosi and Kirsten (1993) found that informal markets are the preferred outlets. This trend was confirmed by USAID (2003), who found that very few farmers sold their livestock at auctions during the periods prior to Christmas and Easter. These periods coincide with the return of family members from urban areas and thus an increased demand for traditional livestock slaughtering.

3.2 Speculators

Small-scale farmers have to, amongst others, rely on speculators to sell their animals to meet the need for more than normal amounts of cash during certain critical periods of the year. It often happens that the farmers sell animals below market value due to a weak negotiating position and bad timing. Fidzani (1993), found similar trends in Botswana. A perception exists in some instances, with good reason, that the speculators are exploiting the poor bargaining power of the farmers. On the other hand, poor infrastructure and a lack of infrastructure do not influence these buyers as they provide their own loading and transport services.

3.3 Auctions

During the homeland era, the Departments of Agriculture of the former Ciskei and Transkei governments created parastatal marketing boards. These marketing boards ceased to exist in 1992 as a result of political transformation coupled with market deregulation. Since 1999, isolated efforts to improve livestock marketing have been initiated by Government and donors. These programs include the Land Care Project that is very successful in the improvement of wool production and marketing, and the Agrilink Project which initiated rural livestock auctions. These systems were successful as long as the services were financially supported by Government.

ISSN 0301-603X

4. MARKETING CONSTRAINTS FACED BY SMALL-SCALE FARMERS

4.1 Poor condition of livestock

Although a lack of buyers is frequently given as a reason why small-scale farmers are unable to access the market, the fact is that when such buyers do wish to buy from small-scale farmers, the poor condition of livestock results in lower farm gate prices, especially during dry spells. Livestock auctioneers and speculators often raise concerns that they cannot pay competitive prices for animals that are in poor condition or not ready for the market (Luppnow, 2003). De Waal (2004) mentions that the poor condition of livestock is important, but the age of animals (too old) when farmers do sell, is equally contributing to poor prices. Poor condition of livestock is also attributable to inadequate grazing and the extreme degradation of the natural resource. Lack of suppliers of important agricultural inputs for livestock farmers, such as vaccines and feed supplements, and common problems of genetic inferiority of animals further reduces the desirability of animals.

4.2 Lack of marketing information

According to Bailey *et al* (1999), weak public information systems contribute to the importance of informal networks within the marketing system in rural areas. Although considerable progress has been in the provision of communication systems such as telephone and cell phone facilities, the farmers remain uninformed in terms of market prices, trends and auction sale dates. Radio and word of mouth is still used as main source of information.

The lack of information usually results in price discovery informed by judging body conformation rather than weight of livestock. Auctioneers and speculators normally have better information about market prices, while small-scale farmers are seldom adequately informed. This results in asymmetric information which in turn leads to market imperfections, and hence the situation that small-scale farmers find themselves in. This tendency leads to frustration during negotiations at auction sales and with private speculators. Low rates of price acceptance, in turn, reduce the number of buyers willing to deal

with the farmers. Poor communication at the auction sales and a lack of market information hampers the successful conclusion of transactions.

4.3 Unwillingness and inability to adopt livestock identification

The Livestock Identification Act renders livestock branding and marking compulsory within the livestock industry. This is, however, not an ideal situation within the small-scale livestock sector, as very few stock owners have registered brands. USAID (2003) found that the immediate constraint to marketing was the illegal marking of livestock, and consequently many farmers were turned away from auction sales. USAID (2003) further list the following reasons for farmers failing to mark their animals.

Firstly, farmers are reluctant to register a unique brand because of the costs (R100) of registration, as well as the costs of acquiring branding equipment. This results in the unmarketability of animals. Secondly, stray animals on the roads cause accidents and loss of both animal and human lives. The owners of these animals are reluctant to register their stock in the event of legal claims being lodged against them. The last and probably the most important reason is a lack of facilities to brand animals. This reluctance also has a negative impact on future marketing options as it reduces the traceability of animals.

4.4 Lack of infrastructure

Infrastructure involves both the physical (communication, transport and roads) and institutional infrastructure (market information, security and animal disease control). Small-scale farmers are mostly found in areas remote from market places, where there is a serious lack of the aforementioned facilities (BATAT, 2004). Furthermore, distance between the area of production and well-established markets necessitate the transportation or "trekking" of livestock. According to Bailey *et al.,* (1999), transport is the most important weakness in the livestock marketing system in Kenya; these findings are similar to that of Sartorius von Bach (1992) in Namibia. NERPO (2004) confirms that the lack of marketing facilities, such as sale pens and loading ramps, are one of the myriad of factors that imposes a serious constraint on small-scale farmers' ability to market their cattle.

4.5 Poor production and marketing management

Vink (1986) and Tapson (1990) highlight the differences in objectives and utility functions which guide resource-use decisions between small-scale livestock farmers in communal areas and commercial livestock producers. Small-scale farmers, as pointed out earlier, have non-economically quantifiable reasons for keeping stock. Strategies are needed to improve livestock condition in order to increase income and profits through increased prices for those animals that are actually marketed. This approach involves changing small-scale farmers' attitude towards their herds.

Fidzani (1993) for example, also found that small-scale farmers in Botswana sell animals due to crises regarding household obligations. As a result, better-performing animals are sold because of their good condition at the time. Animals in poor condition are retained without any selection for genetic superiority. In addition, the communal land tenure system impedes herders' ability to adopt proper improved breeding methods which would increase production levels and allow for the occasional sale of "surplus" animals (Fraser, 1985).

5. A STRATEGY TO IMPROVE THE MARKETING OF LIVESTOCK

5.1 Increased livestock quality and condition

Plausible efforts are made to improve the genetic quality of animals (ECDALA, 2003). Several programs have been initiated by the National Department of Agriculture (NDA), and the Agricultural Research Council (ARC) to improve the quality of herds. However, genetic improvement does not directly guarantee an increase in the off-take of animals, considering the aforementioned non-market benefits.

The condition of the animals plays a far greater role than genetic quality per se with regard to marketability. Concerted efforts thus have to be made to improve grazing conditions that relate to rounding off of animals. The genetic improvement of livestock will contribute to increased profitability. According to Bembridge (1975), the only means of raising productivity in the emerging sector is by increasing overall efficiency through improved calving rates, decreased mortality, reduced

age at sale, increased slaughter mass and high grades. Kumar *et al*., (2000) are of the opinion that improved livestock management by small-scale farmers would contribute to farm income, nutrition and sustainability of livestock production.

5.2 Provision of market information

Yoba (1997) stresses that farmers participating under poor marketing information circumstances cannot graduate to become fully fledged farmers without access to the necessary sources of information, which will empower them as independent decision makers and adopters of appropriate technologies. The problem of inadequate information provision is widespread in the Eastern Cape Province, particularly in the very remote areas. For example, some areas of the Ukhahlamba District Municipality have virtually no telephone networks; neither do they have mobile phone signals and are located far from service providers.

Livestock agencies, wool brokers and private abattoirs are more than willing to provide data on prices and quantities (Luppnow, 2004). There are, however, very limited avenues by which market information could be disseminated to small-scale farmers in rural areas. USAID (2003) found that the use of radio in rural areas is still common. However, market information, for instance radio broadcasts of current beef price per kilogram live weight, is not in an acceptable format, since farmers cannot interpret the total value of their animals.

5.3 Broadening access to livestock identification facilities

Various activities are aimed at accelerating the brand registration process (ECDALA, 2003). These activities include cheaper rates for small-scale farmers, area identification and local government intervention. Progress has been made by Emalahleni Municipality; the municipality provides the basic infrastructure such as handling facilities, branding equipment and temporary contracted staff to mark the animals in the area (USAID, 2003). This model could be extrapolated to other local governments to ensure efficient marketing of livestock. This strategy could serve as a theft combating system within the small-scale livestock sector.

ISSN 0301-603X

5.4 Marketing infrastructure

Apart from the key environmental constraints, such as the lack of fencing and stock water, the efficient participation of small-scale farmers in the marketing of livestock is impeded by the fragmented and discrepant infrastructure available in rural areas. The roads are mainly gravel and severely eroded, rendering access to the livestock production areas difficult. According to Kgantsi and Mokoene (1997), lack of properly maintained roads, telephones, fencing, water and electricity makes it very costly for farmers to run their farming operations.

According to BATAT (2004), participation of communities, farmers and traders has been neglected in the Government's endeavors to provide marketing infrastructure. The strategy should be that farmers and traders contribute in some way to the provision and maintenance of a marketing infrastructure. A practical solution would be the allocation of a portion of the levied commission at auctions towards the local farming community. This will enable local farmers to maintain the existing marketing facilities. In doing so, traders and farmers share the maintenance cost. In addition, since infrastructural development is fundamental and viewed as a priority by Yoba (1997), it is clear that a greater emphasis is needed on the development of infrastructure to ensure reasonable access to regional economic nodes.

5.5 Farmer education

Small-scale farmers in rural areas are frequently subject to high illiteracy (Kumar *et al*., 2000). Reducing illiteracy levels is, to a large extent, a challenge faced by all stakeholders. Specifically, training programs should be focused on visual aid materials and adequate illustration by weighing animals and applying current market information (prices per kilogram) to determine the current market value. Training should also be directed at developing farmers' negotiating skills during the settlement of transactions.

5.6 Institutional support

5.6.1 Research and development

Research has proved to be more capable of addressing the problems of small-scale farmers, which according to Paterson (1997), is a vital component of the development of any country. However, there is no unity among institutions involved in research in general. This makes it difficult to achieve objectives, and solve the problems encountered by agricultural producers. The role of research in developing small-scale farmers should be reviewed, based on the involvement of farmers in research, providing capacity to extension officers, and the participation of academic institutions in research. The establishment of frameworks to guide initial concepts of research as well as follow-up research, with demonstrations, is required.

5.6.2 Producer organizations

There are several producer organizations within the South African red meat industry, including the National Emerging Red Meat Producers Organization and the Red Meat Producers' Organization. Due to the large number of small-scale farmers in deep rural areas and limited resources, producer organizations' have limited ability to impact in improving the marketing of animals from communal farming areas. This entails that various interlinked aspects relating to the efficient operation of producer organizations must be provided by a means of financial support.

A potential solution to this situation is that the Government should contract producer organizations to jointly assist in the management and service delivery of agricultural extension and rural development.

- Producer organizations must empower livestock producers' capacities effectively to play the self-ability for acting role.

- The extension and rural development networks must be reorganized and agents trained on new approaches and performance.

ISSN 0301-603X

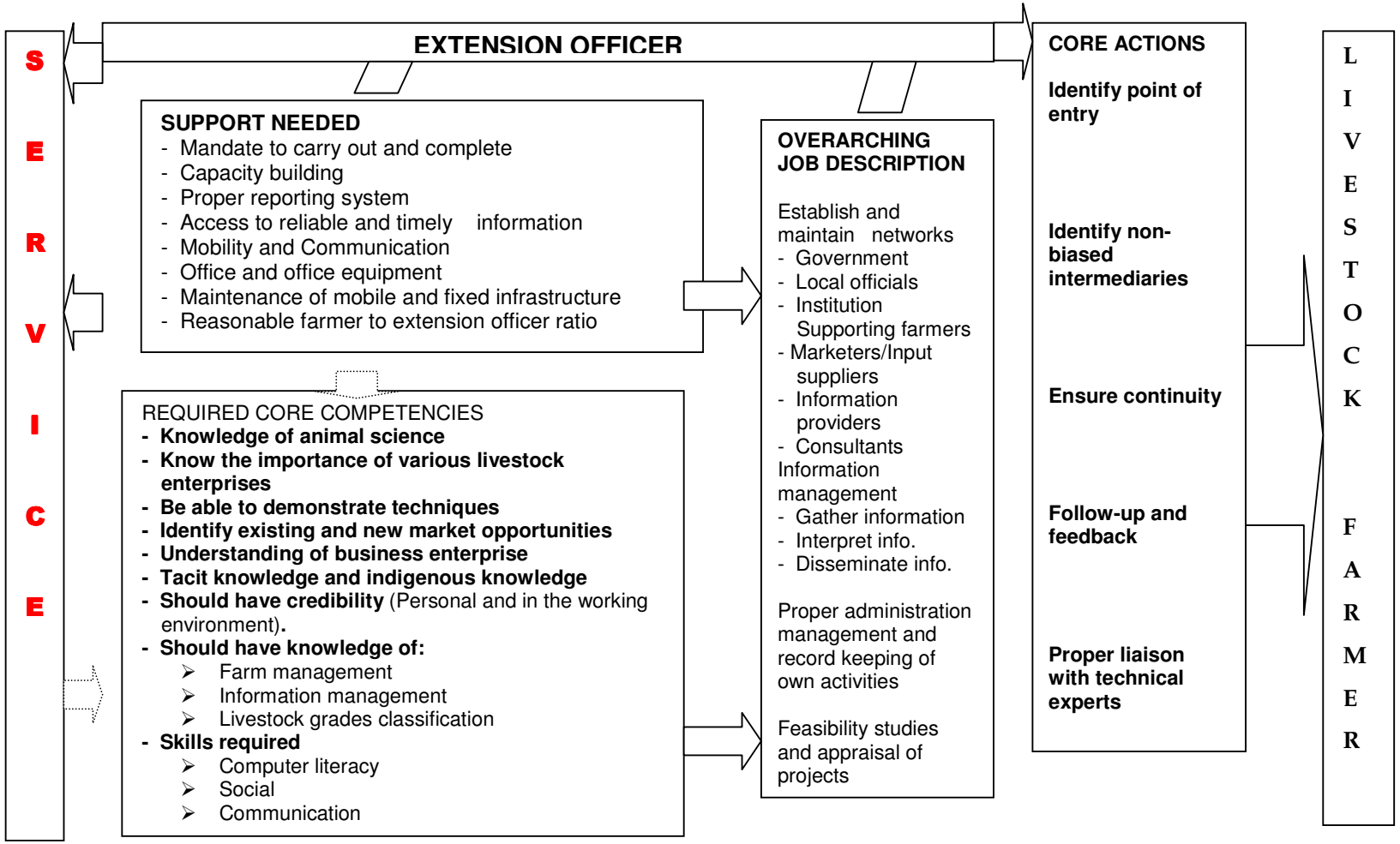

Figure 1: A proposed model for the efficient provision of extension services

- Training must be reoriented according to producers' and market demands.

- The Government and the private sector should assist these organizations with funding to maintain the capacity while changing the focus on service provision.

6. IMPLICATIONS FOR EXTENSION SERVICES

Figure 1 shows a proposed approach to improving agricultural extension service provision. The proposed model addresses a set of prerequisites for an effective agricultural extension service. This model includes extension services, support needed for effective delivery of services, the required competencies of extension officers, overarching job descriptions for extension officers and their core actions.

- *Support needed*

As early as 1975 Bembridge indicated that the role of extension services is to provide technical and economic assistance to farmers and to assist them to make the best possible use of their resources. This necessitates the provision of extension services guided by a clear mandate to carry out and complete tasks. The support system for extension officers should include among other things, a proper reporting system, improved mobility and communication. Maintenance of infrastructure (i.e. vehicles, fuel, telephones and computers) should not be compromised because it is really difficult for an extension officer to operate under circumstances of limited resources.

- *Core competencies required*

It is realized that core competencies play a vitally important role in the successful implementation of agricultural extension programs. Woodburne and Wamukoya (1997) found that extension officer's were incompetent regarding the subject matter. Figure 1 indicates the required core competencies that will lead to improved productivity and efficiency within the small-scale livestock sector. Compliance with the required competencies consequently allow for measurable recognition of the

extension officers' inputs. The required core competencies include knowledge of animal science, an understanding of business in the context of tacit and indigenous knowledge, and the ability to identity existing and new market opportunities within the set of constraints. Competencies in agricultural extension furthermore include knowledge of farm and information management, specifically in relation to livestock farming. In addition, computer literacy and social, negotiation and communication skills are required.

- *Overarching job description*

Having mentioned the support needed and competencies required for extension officers, cognizance must be taken that the aforementioned does not guarantee better performance by itself, and therefore a clear job description should be drawn-up to guide the extension service. The job description involves responsibilities for which extension officers must be accountable. These include the establishment and maintenance of networks with all stakeholders, information management, project appraisals and a good administrative system.

Given all the requirements, extension officers' should approach small-scale farmers in the following manner:

- Identify point of entry
- Identifying non biased intermediaries
- Ensuring continuity of service delivery
- Follow-up action and feedback
- Proper liaison with technical experts.

The model suggested in this study could be a useful tool to assist Government in ensuring that extension services are effective and efficient enough to increase:

- The adoption and use of technology and practices
- Farmer productivity and efficiency
- Livestock sales and input use

In addition, the following aspects are regarded as critical for the improvement of the current market performance of small-scale farmers. An efficient agricultural economics division that is decentralized in a Province would ideally support these activities. Such a division is regarded as part of the support services to small-scale livestock farmers.

- *Market information*

Market information has become a common topic for studies conducted since after market deregulation in South Africa. This study considers extension officers to be pillars forming a direct link between farmers and the buyers of livestock. This implies that farmers can receive market information in time and at their convenience, from extension officers. Notwithstanding the capacity of other media sources including, among others, cellular messaging, postal mail, magazines etc., extension officers are regarded as the best verbal communication channel through which marketing information could be disseminated. It is therefore important that the government changes their approach to managing extension services. It is recommended that marketing projects be conducted in a similarly way to the Agrilink project initiated by USAID, where the success of extension officers in terms of their personnel assessments is measured by the number and value of livestock sold; a mechanism which incorporates the marketing of animals in the informal markets should be in place, since one can postulate that improved extension will also result in higher output to this market. This can be an effective way of moving from traditional agriculture to commercial agriculture. Furthermore, this will improve service delivery, thereby accelerating agricultural development.

Extension officers must be equipped with market information, specifically price movement and be able to interpret such information. Government has committed itself to providing such information (ECDALA, 2003). However, the current state of affairs does not align with the latter because the information does not filter through to the farmers. The provision of market information will strengthen farmers' negotiating ability during transactions with individual speculators and consequently prevent the possible exploitation of farmers by better-informed buyers.

Extension officers should understand the needs of communal livestock farming communities. This means that they must know when information is needed, the most suitable method of disseminating information, whether it is mobile phone messages, magazines, leaflets or other available alternatives that best suit the needs of information for specific farmers. This will easily create awareness among farmers.

- *Farmer organizations*

Extension officers should have well-established linkages with the major auctioneers and private speculators in their areas. This will not only serve to prevent exploitation by individuals, but also to identify sufficient numbers of tradable animals to justify auctions. The system will improve relationships between farmers, extension officers and traders. The relationship will also address complaints raised by livestock agents namely that they lack farmer support at rural livestock auctions. Regular attendance and information transfer at farmer meetings is essential for continued success of this approach. According to Bembridge (1975), participation in producer organizations is likely to be associated with practice adoption and improved farming efficiency. This entails that the more the farmer participates, the more informed the farmer will be. Producer organizations could then be used as centres for transferring marketing information as well as formation of co-operative marketing systems.

- *Farmer support during auctions*

It is a reality that livestock auctions involve aggressive bidding that requires quick understanding and decision making. Unfortunately not all farmers understand these procedures. Moreover, bidders are said to influence the prices of livestock to some extent (Nkosi and Kirsten, 1993). This clearly comes as a threat to small-scale farmers, inhibiting them from offering livestock at auctions. The pressure on farmers at auctions further enhances the popularity of sales by private treaty in a calm environment. In addition, some of the farmers don't understand clearly the language used during transaction settlement and huge dissatisfaction with commission deductions are often experienced (USAID, 2003, and Nkosi &

Kirsten, 1993). Having considered the aforementioned, it remains imperative that well informed extension staff can play an important role at livestock auctions by advising individual farmers on issues pertaining to procedures, language used and the bidding system at auctions. The frustrations often expressed by farmers and auctioneers can be overcome to a large extent, thus creating an enabling environment for all participants.

- *Establishment of synchronized production and marketing*

For many years the extension service focused on maximizing production and minimizing costs. This is detrimental to the use of market information to guide production. The key challenge to extension is now to focus on production that is directed at correct timing, acceptable quality and delivery of products. An adoption of a market orientated production program, involving the timely mating and weaning of herds, could vastly improve the market off-take of animals. If buyers are able to provide a product characteristic in terms of quantity, quality etc., the extension service can be able to advice farmers based on the market demands. A regular marketing program requires that current production systems be aligned with the natural production cycles of farmers in the rural areas. It will reinforce consistent income generation at times when cash is most needed in households.

8. CONCLUSION

The small-scale livestock farming sector, specifically those involving cattle, presently experiences a strong desire for a well-structured extension support system that encompasses the marketing exposure of an otherwise dormant enterprise. This paper presented some critical issues that need to be considered by all stakeholders in the livestock industry with specific reference to extension services. These include concerted efforts to provide extension officers with the capacity, support and physical means to expose small-scale farmers to markets. Practical experiences with other projects in the Province have proven to be efficient at improving the market off-take of animals, specifically cattle. These services to farmers fit in well with the broad duties assigned to extension officers.

It is evident that an integrated approach is likely to underpin an efficient livestock marketing system. This entails an understanding of farmer livelihoods and their development in a much more explicit context of community dynamics. Market opportunities for small-scale livestock farmers exist. The issues that need to be addressed are practical in nature and would require a joint effort by Government, small-scale farmers, producer organizations and private sector role players. Furthermore, to achieve improved marketing efficiency, this paper concludes that attention must be given to institutional arrangements and their relationship with the environment at large. Tasks for extension must be executed in accordance with existing producer and market demands.

REFERENCES

AINSLIE, A., KEPE, T., NTSEBEZA, L., NTSHONA, Z., & TURNER, S., 2002. Cattle ownership and production in the communal areas of the Eastern Cape, South Africa. *Research report no. 10*. University of the Western Cape.

BATAT, 2004. Report of BATAT: Marketing Design Team Compiled by Jerry Tube, http://www.nda.agric.za/docs/Batat/marketing.htm#1. %20INTRODUCTION.

BAILEY, D., BARRETT, C.B., LITTLE, P.D. AND CHABARI, F., 1999. *Livestock markets and risk management among East African pastoralists: A review and research agenda*. Unpublished research report, Utah University, USA.

BEMBRIDGE, T.J., 1975. *The communication and adoption of beef cattle production practices in the Matabeleland and Midlands Provinces of Rhodesia.* PhD dissertation, University of Pretoria. Pretoria.

BIRNER, R., 1999. *The role of livestock in agricultural development: Theoretical approaches and their application in the case of Sri Lanka*. Ashgate Publishing Ltd. Vermont.

DE WAAL, H.O., 2004. Department of Animal Science, University of the Free State (Personal communication).

ECDALA, 2003. *Annual report 2002/2003 – Province of the Eastern Cape.* Department of Agriculture, Bisho.

FENYES, T.I. & GROENEWALD, J.A., 1985. Aspects of agricultural marketing in Lebowa. *Development Southern Africa*, 2 (3):398–410.

FIDZANI, N.H., 1993. *Understanding cattle offtake rates in Botswana*. PhD dissertation. Boston University, Boston,

FLETCHER, L.B., 1965. Commodity markets and marketing. In: *Centre for Agricultural and Economic Development, Economic Development of Agriculture*. IOWA State University Press, Ames, Iowa.

FRASER, G.C.G., 1991. *Agricultural marketing in less developed countries with special reference to Ciskei*. PhD dissertation. University of Stellenbosch, Stellenbosch.

HOBSON, F.J., 2004. Department of Agriculture and Land Affairs, Eastern Cape Province (Personal communication).

ISRDS, 2004. Information from website: http://www.dplg.gov.za/html/progs/ISRDP.htm

JOOSTE, A., 1996. *Regional trade of beef in southern Africa*. Unpublished MSc (Agric) thesis. University of Pretoria. Pretoria.

JOOSTE, A., 2001. *Economic implications of trade liberalisation on the South African red meat industry*. Unpublished PhD dissertation, University of the Free State, Bloemfontein.

JOOSTE, A. & ALEMU, Z.G., 2004. *The impact of the exchange rate on beef prices and imports*. Working Paper, University of the Free State. Bloemfontein.

JOOSTE, A. & VAN ROOYEN, C.J., 1996. *Access to emerging farmers in the red meat industry.* All Africa Conference on Animal Agriculture. Pretoria.

KGANTSI, M, & MOKOENE, S., 1997. *South African farmer support services: An end-user perspective*. Unpublished research report. Development Bank of Southern Africa.

KING, A.N., 1985. *Agriculture: An introduction for Southern Africa*. Cambridge University Press. Cambridge.

KUMAR, S., CHANDER, M. & HARBOLA, P.C., 2000. Livestock based farming system – A case study of Kumaon Hills. *Indian Veterinary Research Institute*, 8(2).

LUBBE, W.F., 1992. *The red meat marketing scheme: An evaluation in a dynamic environment*. Unpublished PhD dissertation,. University of Pretoria, Pretoria.

LUPPNOW, E.F., 2003. Tomlinson and Wooton. Eastern Cape Province (Personal communication)

MEISNER, H.H., HOFMEYER, H.S.J., VAN RENSBURG, W.J.J. & PIENAAR, J.P., 1983. *Classification of livestock for realistic prediction of substitution values in terms of a biologically defined large stock unit*. Department of Agriculture, Pretoria.

MOOROSI, L.E., 1999. *Characterisation of small- scale cattle farming in Botshabelo and Thaba-Nchu Districts of the Free State*. MSc Thesis, University of Free State. Bloemfontein.

NDA, 2003. *Abstract of Agricultural Statistics - 2003*. National Department of Agriculture. Pretoria.

NELL, W.T., 1998. *Transfer and adoption of technology: The case sheep and goats farmers in Qwaqwa.* PhD dissertation. University of Free State, Bloemfontein.

NERPO, 2004. Information from website: http://www.nerpo.org.za.

NKOSI, S.A. & KIRSTEN, J.F., 1993. The Marketing of livestock in South Africa's developing areas: A case study of the role of Speculators, Auctioneers, Butchers, and Private Buyers in Lebowa. *Agrekon*, 32(3):200-237.

OUMA, E.A., OBARE, G.A. & STAAL, S.J., 2003. *attle as assets: Assessment of non market benefits from cattle in stallholder Kenyan crop-livestock systems.* Paper presented at the International Conference of Agricultural Economists.

PATERSON, A.G., 1997. *Farm support services in South Africa.* Unpublished report, Development Bank of Southern Africa, Midrand.

ROCHA, A., STARKEY, P. & DIONISIO, A.C., 1991. Cattle production in Smallholder Farming Systems in Southern Mozambique. *Agricultural systems*, 37:55–75.

SARTORIUS VON BACH, H.J., 1990. *Supply response in the Namibian beef industry.* Unpublished MSc (Agric) thesis, University of Pretoria, Pretoria.

SCHWALBACH, L.M., GROENEWALD, I.B. & MARFO, C.B., 2001. A survey small– scale cattle farming systems in the North West Province of South Africa. *South African Journal of Animal Science*, 32(4):230–237.

TAPSON, D.R., 1990. *A socio-economic analysis of small-holder cattle producers in Kwazulu.* Unpublished PhD dissertation, Vista University. Mamelodi.

VINK, N., 1986. *An institutional approach to livestock development in Southern Africa.* Unpublished PhD dissertation, University of Stellenbosch, Stellenbosch.

USAID, 2003. Agrilink II Project 2003, Monthly progress report #22, South Africa.

WOODBURNE, S.J. & WAMUKOYA, H., 1997. *Lending a hand to the small farmer*. Unpublished research report, Development Bank of Southern Africa, Midrand.

YOBA, T.V., 1997. *Kynoch fertilizers' experience with farmer support services within developing agriculture.* Unpublished research report, Development Bank of Southern Africa, Midrand.