Pastoralists and markets: livestock commercialization and food security in north-eastern Kenya
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Livestock marketing: channels and information systems

In this chapter, we review the various channels in the livestock marketing process in Garissa District. A more detailed discussion on the various actors in the marketing chain is given in the next chapter, but some will be mentioned here as well. Market information is considered important in any effective livestock commercialisation in the region and to this end we will discuss the various sources of information and the dissemination of information among the Somali pastoralists of Garissa District.¹

Livestock marketing channels in Garissa District

Marketing channels are defined in different ways by different authors. Stern et al (1988:3) views marketing channels as 'sets of interdependent organisations involved in the process of making a product or service available for use or consumption'. Kohl and Uhl (1990:529) define marketing channels as 'alternative routes of product flows from producers to consumers'. According to Kotler (1997), a marketing channel performs the work of moving goods from producers to consumers, thereby overcoming the time, place and possession gaps that separate goods and services from those who need or want them. These definitions concern agricultural products. Livestock marketing in Garissa District is not as well developed as the marketing of agricultural products elsewhere but the general elements are relevant in the case of livestock marketing as well. With some modification, the following definition for livestock marketing channels is proposed:

¹ Some of the materials in this chapter are presented courtesy of the Panos Institute in London which collected information on 'communication needs assessment' of pastoralists, including those of southern Garissa.
Livestock marketing channels are the various processes by which livestock moves from producers to the final consumer through the mediation of marketing intermediaries (actors). The various marketing channels form the marketing structure within a particular marketing environment.

The government role in livestock marketing is important. Where there is a high level of government involvement and control of livestock marketing, there may be fewer marketing options and consequently fewer channels. This has been the case in Kenya, both during the colonial period as well as in the post-colonial era. Until the Swynnerton Plan of 1954, colonial policy formalised the existing tribal boundaries of pastoralists for reasons of administrative control. However, a change of policy towards pastoral areas was manifested in the Swynnerton Plan, and a deliberate effort to promote increased livestock sales from pastoral areas was initiated. The Kenya Meat Commission (KMC) was established in 1950 with a mandate to purchase livestock from the European settlers. However, it could not compete with private traders since it was constrained in its activities in native areas by official regulations. Although the KMC still continued to operate, another public institution, the African Livestock Marketing Organization (ALMO), was formed in 1952 with the authority to pay subsidised purchase prices if necessary in order to encourage sales by African pastoralists. While the KMC bought livestock from European farmers, the private traders and the ALMO continued their livestock purchases from pastoralist producers in many parts of the colony. The less-developed marketing channels from pastoral areas to the densely populated highlands, and government regulations such as movement restrictions for fear of disease transmission, reinforced the market dichotomisation whereby the settlers sold to the KMC while the African pastoralists sold to private traders and to the ALMO (Evangelou 1984).

During the years after colonial rule, the independent Kenyan government was preoccupied with protecting urban consumers with little regard for rural producers. This took the form of controlling meat prices and putting in place numerous bureaucratic restrictions on livestock marketing, such as the need for movement permits and quarantines. Movement permits had to be issued by the veterinary authority of the originating district to confirm that there was 'no objection' to the animals being moved from one market to another. A movement permit had to specify the number of animals, the destination, the number of days expected to be in transit and the route to be taken (Evangelou 1984). In addition, the permit had to state the mode of transport, and the vehicle registration number if the animals were to be trucked. On some occasions, the absence of veterinary officials for a certain period effectively made it impossible for livestock traders to sell livestock outside Garissa District. Although the government rules were sometimes flouted by traders, the fact that many animals could only cross the river Tana at the one bridge, helped to enforce the controls. However, some traders managed

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2 While the ALMO was authorised to subsidise livestock producers, the Livestock Marketing Division (LMD) which was formed in the 1960s to purchase livestock from pastoralists, actually ended up subsidising the urban meat consumers. This happened because the LMD paid low prices to pastoralists for livestock while selling meat at controlled prices, mainly benefiting urban consumers.
to take their animals to Nairobi and Mombasa markets along unofficial routes by bribing those responsible for the enforcement of the regulations.

The Livestock Marketing Division (LMD) and the Range Management Division (RMD) of the Ministry of Agriculture and Livestock Development were established after independence to deal with livestock marketing and range development respectively. The LMD was supposed to purchase livestock from the northern rangelands and take the animals to ranchers in the highlands for fattening, or to the KMC depots for slaughter. The LMD did indeed purchase livestock from Garissa District but was unreliable since its requests to potential suppliers were irregular and often at short notice, as were its rules on the type and quality of animals required. It was an additional channel of livestock marketing, but it was not a reliable one. Although meat markets were liberalised in the late 1980s leading to fewer market regulations, the livestock marketing opportunities in the area have remained limited for three main reasons:

a) Insecurity restricts the exploitation of rural markets, interferes with flows of livestock from the more distant markets to the regional ones and the flow of money and merchandise in the opposite direction;
b) Lack of marketing infrastructure such as operational holding grounds, auction yards and reliable veterinary services impedes trade; and
c) Lack of reliable market information makes producers and traders hesitant to enter the marketing system.

These factors, along with the variable environment with periodic droughts, make livestock marketing in Garissa District unstable and restrict the development of marketing channels. In the case of Garissa District, a number of actors are involved in livestock marketing including the livestock producer (pastoralist), livestock broker, small-scale livestock trader, large-scale livestock trader, butcher and the consumer. In addition there are a number of actors who may be referred to as 'facilitators'. These include the paid herder who treks the animals, the tax man who collects taxes and provides the loading yards, and the truck owners who truck the animals to various larger markets for a price. Kotler (1997) differentiates between a broker and a facilitator in an agricultural context. While both are intermediaries in the marketing process, the former brings buyers and sellers together and negotiates between them, while the latter assists in the distribution process but does not take title to the goods or negotiate purchases or sales. Although a detailed discussion of the actors is the subject of the next chapter, it is important to offer some basic clarification here. While all the other actors in livestock marketing among the Somali of north-eastern Kenya take actual title to the animals, the broker does not. However, the broker is important because he plays three roles: negotiating between the buyer and the seller; selling on behalf of the owner of the animals; and buying animals when the opportunity is attractive enough (hence becoming a trader at that time). In most cases, the pastoralists prefer to sell their livestock through a broker rather than directly to a trader or to the consumer because the brokers are often better informed about market conditions. Moreover, in the rural markets, brokers are commonly from the local sub-clans and are trusted by their own people.
Each intermediary in the marketing process between the producer and the consumer constitutes one level of the marketing channel. Thus the length of the marketing channel is determined by the number of intermediary actors in the channel.

**Figure 4.1**
Livestock marketing channels at different levels

![Diagram of livestock marketing channels at different levels]

Note: ss trader = small-scale trader; Ls trader = Large-scale trader.

In Figure 4.1, an illustration of different livestock marketing channels is presented. These are the most important levels that can be found in the Garissa area, with varying degrees of importance, both in terms of volume and the number of actors involved in each category. Depending on the number of intermediaries between the pastoralist producer and the final consumer, the marketing may be referred to as having various levels in the marketing chain. According to Kotler (1997), such levels are called zero-level, one-level, two-level and so on. Although there may be alternate levels of actors’ interaction in the market, these are of less importance. The diagram only depicts the most important marketing channels in the area. The different levels are explained as follows:

i) **Zero-level channel:** This is the marketing channel through which the pastoralist producer sells his animals directly to the consumer without any intermediaries. This channel is less prevalent in most of the markets in Garissa District. It is found mostly during festivities such as Muslim days for slaughter, weddings and other rituals when individuals buy specific types of animals from their neighbours or from others elsewhere. It is commonly used by the pastoralists who are familiar with the market and it usually involves only a few head per producer.

ii) **One-level marketing channel:** This is when the producer sells to a small-scale trader or to a broker who in turn sells to the consumer. Usually, the broker sells on behalf of the producer assuming the powers of the owner in the sale. This is common in the smaller markets in locations and divisions of the district further from Garissa town.

iii) **Two-level marketing channel:** In this channel, the pastoralist producer gives the animals to a broker who sells on his behalf to a small-scale trader who finally sells to the consumer. The broker may take the animals from the pastoralists at the kraals or in the market and sell them. The small-scale trader usually purchases the animals from the broker at the small trading centres, but can also do so at in the larger markets. It is similarly common for the producer to sell to the small-scale trader who then gives his animals to the broker to sell on his behalf to the consumer. Thus, the broker may sell for
the pastoralists or for the small-scale traders, or both, in this common channel in the rural markets of the district.

iv) Three-level marketing channel: This is the channel in which the pastoralist gives the animals to a broker who sells on his behalf to a small-scale trader. The small-scale trader sells to a large-scale trader or his agent, who finally sells to the consumer. The sale by the small-scale trader to the large-scale trader or to an agent usually takes place at the main regional markets although it may also occur in the smaller rural markets. Agents work for large-scale traders and may or may not be known as a representative of the trader. He is usually given money for the purchase of animals on behalf of the large-scale trader. Where he is not known, he actually acts as a trader, but where the large-scale trader concerned enjoys goodwill, it is beneficial for the agent to mention his boss in order to get the support he may need in the area. The final sale of the large-scale trader to the consumer is sometimes in the form of meat, especially when the trader has a slaughter outlet. This channel is more commonly found in Garissa town than in the rural markets.

v) Four-level marketing channel: In a four-level marketing channel, the pastoralist producer gives the animals to a broker to sell on his behalf. The broker then sells to a small-scale trader, who in turn sells to a large-scale trader or his agent who then sells to a butcher or a slaughter house. The butcher then sells the meat to the consumer. This channel level is less common in Garissa town but more prevalent in the larger markets in Nairobi and Mombasa where livestock from north-eastern Kenya are taken for sale.

There may be more levels in the channel depending on the differentiation of the market. For instance, there could be a broker between the producer and the small-scale trader and between the large-scale trader and the butcher as well. There is some overlap between the roles and activities of the market actors presented in the diagram. A pastoralist producer could himself be involved in the trading of livestock on a small scale, mainly small stock while his primary concern is livestock production. Similarly, a small-scale trader could also operate a butchery and act as an agent for a large-scale trader. As an agent, he keeps the large-scale trader's money and buys animals on his behalf. This complexity in livestock trade actors was observed by Evangelou in reference to the livestock trade among the Maasai as follows:

The indistinctiveness of the trader identity is compounded by the fact that transactions may be sporadic and take place within a local market's catchment area, comprise a full-time and interregional business, or constitute any temporal-spatial combination between these extremes (Evangelou 1984:218).

The livestock trade network in Garissa District is probably less complex than it is in Maasai areas but it is not a simple network. Although the large number of actors in livestock marketing and the use of refrigerated meat vans as in Kajiado District (see Zaal 1998), is absent in the Garissa case, the marketing system is expanding into the rural parts of the district. To understand the movement of marketed livestock in the area and the extent of 'market catchment' in Garissa District, Figure 4.2 shows the approximate flows of livestock through the district as well as the flows in relation to other main livestock markets in the country.
Livestock flows in the region are usually from producers (pastoralists) to small market centres that act as collection points for both small-scale and large-scale traders. Although some of the marketed livestock in the rural markets may be temporarily kept away from the markets for various reasons, most of the traded animals are taken to the bigger regional markets like the one in Garissa town. A small number of livestock, mainly small stock, leave the Ijara market for Lamu on the Kenyan coast. Similarly, a limited number of animals from Huluhgo and Masalani are sold in Lamu through the Ijara market centre. Livestock from Ijara, Hulughho, Masalani and Bura may also be taken to Mombasa via the bridge at Bura. The Masalani market centre would, in theory, be the nearest point to cross the river with livestock destined for the Mombasa market but the absence of a bridge
renders this impossible. However, there is a proposed bridge at Masalani which would
enhance livestock marketing from the south of Garissa District when it is completed.

At the Garissa regional market, the animals are resold to various market actors,
mainly traders and some butchers. There is also some flow of livestock from Wajir and
Mandera Districts and from across the border in Somalia to the regional market of Garissa
where they are sold and trekked or trucked to Nairobi or Mombasa. The main
destinations for the livestock from Garissa District are Nairobi and Mombasa, with more
small stock going to Mombasa and most cattle going to Nairobi. Once in these main
national markets, the animals are sold to large butchers and various institutions such as
educational establishments, hospitals, the armed forces, or private individuals. The main
markets for livestock in Mombasa are in Mariakani and Mombasa town, and those in
Nairobi are in Dagoretti, Dandora, Kariobangi and Athi River. Livestock movement from
Garissa to the national markets is mostly by truck, since insecurity along the route makes
livestock trekking a risky undertaking. However, there are a few cases where traders trek
animals for some distance between Garissa and their main destination (Nairobi or
Mombasa), despite the risks involved. This is usually to avoid the fee the traders have to
pay at the bridge and at the loading bay in Garissa market. In such circumstances, they
improvise loading places at dry dam sites and load animals onto waiting trucks. The
traders increasingly use bigger trucks with an average capacity of 14-18 head of cattle or
100-120 head of small stock (The variation in the number of animals trucked is due to the
size of the animals being transported).

It is postulated that there may be a relationship between distance, the size of flow
from the rural markets and the size of the end market (regional or national) on the one
hand, and the degree of development of the livestock marketing chain on the other. It may
be argued that the more sophisticated a livestock production technique, the more likeli-
hood there is that livestock marketing will be complex with more vertical differentiation.
For instance, where livestock production is capital-intensive using, artificial
insemination, purchased feeds, fattening and is highly commercialised, the marketing
channel will be more complex compared to extensive livestock production on natural
forage mainly for subsistence. Capital-intensive livestock production entails complex
marketing channels due to the high number of actors and/or facilitators involved.

Kohl and Uhl point out that the geographic location of livestock production is
determined by the availability of key production resources such as pasture, water and
labour (Kohl & Uhl 1990). Where production resources are more abundant, there are
higher numbers of livestock, and the markets are likely to attract more buyers and be
more competitive. On the other hand, the number of livestock markets in an area tends to
have a negative effect on the size of flow (the number of animals from each market). This
happens when the livestock volumes per market are low due to dispersion over many
markets, and results in increased transaction costs for traders since they have to buy
animals from several markets to meet their demand. Traders, particularly large-scale
traders, may opt to buy livestock from a market that is large enough to meet their needs
since this reduces their transaction costs and enables them to enjoy economies of scale by
purchasing in bulk. The size of the end market similarly has implications for channel
development as does the stability of a given market over a certain period: the larger and
the more stable the end market, the higher the flow or the number of animals to that market.

Livestock market information

For the livestock channels to function well, there needs to be accurate and timely market information for all the actors in the chain. Kohl and Uhl (1990:529) define market information as: 'Any form of information relevant to a market decision...'. Emphasising the importance of market information, the authors point out that 'accurate and timely market information facilitates marketing decisions, regulates the competitive marketing processes, and lubricates the marketing machinery' (Kohl & Uhl 1990). This definition is broad enough to accommodate livestock market information. Pastoralists as well as other actors in the livestock market need relevant market information to enable them to receive better returns on their livestock. Thus, market information on volumes and prices of various categories of livestock in local and regional markets may go a long way to contributing towards the efficiency of the market.

A livestock market information service should provide information on prices of different categories of livestock as well as other relevant market information that will facilitate informed decisions by all the different actors. If other factors remain the same, the availability of livestock market information minimises exploitation of one actor by another while creating room for arbitrage. Livestock trade takes place because of the existence of differential livestock prices between different markets and over time, coupled with supply and demand, and transaction or negotiation costs.

Sources of livestock market information in Garissa District
Livestock market information is usually obtained at points of exchange, be they at the kraal of the pastoralist producer, the rural market, the regional market (e.g. the one in Garissa) or at the national markets, in Nairobi and Mombasa. The main sources of information for Garissa pastoralists, including market information, are government officials, elected local leaders, and travellers from the area or those passing through in search of lost livestock, making marriage proposals or simply on a visit. Although the information from the government is mainly on issues related to security matters, it used to pass on details about upcoming livestock auctions and their venues, and when vaccination campaigns could be expected. However it should be noted that organised livestock auctions have not taken place in the region for more than a decade and vaccination campaigns for livestock are rare. At present, the government is hardly a source of detailed livestock market information. Also, although traders may be a source of market information, none of the respondents mentioned them as such.

In order to make an assessment of the communication needs of pastoralists for a planned radio programme, the Panos Institute, with the help of the author, conducted

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3 Kotler (1997:3) defines arbitrage as the act of buying at a lower price and selling at a higher price. He differentiates between 'spatial arbitrage', i.e. the price differences between different markets, and 'temporal arbitrage' i.e. price differences between different time periods.
surveys in parts of Garissa District in December 1996. Unstructured interviews as well as group discussions with elders, women, government officials and the youth were held involving a total of 31 individuals. We discussed the means through which the Somali pastoralists normally receive information from the government, how information is passed on within their own groups and within neighbouring groups, and the common issues relayed through these processes. Information from the government is mainly administrative in nature, but includes information on livestock and human vaccinations, visits by senior government officials, and security issues. Government information is passed on to the people in the area through a number of means as presented in Table 4.1 below.

**Table 4.1**

| Most important information channels from the government to the pastoralists  
(N=31; 12/96) | Number | (%) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Channels used</td>
<td>Radio</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Public rallies (barazas)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Government officials</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Travellers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elected leaders</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Other means</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31</td>
</tr>
</tbody>
</table>

*Source: Author's survey*

Radio information appears to be the single largest source of information for the pastoralists of Garissa District. However, this has two main constraints. Ownership of radios among the Somali pastoralists is estimated at 10-15 per cent of the population (personal communication with groups), although the information broadcast over the radio may reach more than 50 per cent of the target population, since the information is passed on to friends, neighbours and others. Nevertheless, the low figure of ownership of radios implies that they should not be relied on as the sole means of disseminating information to pastoralists in the area. Secondly, radio broadcasts currently do not include livestock information. While prices of agricultural products are broadcast officially, those of livestock and livestock products are yet to receive similar attention from the government. Public rallies organised by the chiefs (barazas), as well as information from other government officials also serve as sources of information for pastoralists. However, information on livestock marketing and other aspects of livestock production such as pastures, and water quality and availability are usually received from travellers. The information from the government is mostly on security matters and sometimes on quarantines for diseases and forthcoming auctions.

The Somali pastoralists in the district not only receive information from government officials but they also communicate within their sub-clans as well as with other clans and with members of neighbouring pastoral communities such as the Orma and the Wardei in the rest of Tana River District. Most of the issues on which they exchange information concern the improvement of livestock production such as the
prevailing rainfall, pastures and livestock diseases, livestock prices and the status of the routes to markets, security matters, droughts, and resource sharing during times of localised grazing scarcities. Various means are used by Somali pastoralists in the area to receive and send information to others, both within and beyond the community. Some of the main means used are presented in Table 4.2.

Table 4.2
Most important means of mutual communication between the Somali pastoralists in Garissa District (N=23; 12/96)  

<table>
<thead>
<tr>
<th>Means of dissemination</th>
<th>Number (N=23)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fariin and sahan</td>
<td>8</td>
<td>(35)</td>
</tr>
<tr>
<td>Community elders</td>
<td>7</td>
<td>(30)</td>
</tr>
<tr>
<td>Itinerant travellers</td>
<td>5</td>
<td>(22)</td>
</tr>
<tr>
<td>Other means</td>
<td>3</td>
<td>(13)</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>(100)</td>
</tr>
</tbody>
</table>

*Source: Author's survey*

From the table the traditional *fariin* and *sahan* are found to be the most common means of information dissemination within the community as well as between the community and its neighbours. Most of the information disseminated through *fariin* and *sahan* relates to livestock production and marketing, with the emphasis on the production component. Other means by which the Somali disseminate information include elders and travellers. Travellers are particularly important in so far as they bridge the distance gap and bring information that would otherwise not be available. The elders in the community usually have periodic meetings, among themselves and with elders from other neighbouring pastoral groups. Other means of information dissemination are public rallies, nomadic migrations and weekly gatherings at Friday prayers. The Somali also exchange information with their neighbouring ethnic groups, mainly other pastoralists such as the Orma, on issues of concern. Some of the main topics on which the Somali pastoralists exchange information with others, or even within their own group, are presented in Table 4.3.

The issues on which the Somali pastoralists of Garissa District inform others and are in turn informed about by others, are mainly within the livestock domain. This is to be expected given that the livestock sector is the dominant base of the livelihood of many, directly as well as indirectly. In general, information on livestock marketing on a wider scale is important to the Somali pastoralists, as it may be to other pastoral groups as well.

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4 In Tables 4.2 and 4.3, the sample presented is 31 individuals or less depending on whether all interviewees responded to the questions or not.

5 *Fariin* is a Somali word which literally means 'message'. It is one of the commonest means of sending and receiving information within the Somali pastoral community. For instance, person A travelling from one place to another is asked by persons or persons B to take certain information to another one or more people, C, who is (are) either on his way or close to his destination. In some cases, a person may be sent specifically to deliver messages.

6 *Sahan* is a Somali word which means 'reconnaissance'. It is commonly used to refer to missions going in search of suitable pastures and water for livestock before they can migrate. It may also be used to send a person to a trading centre to report back on livestock prices, and any other issues of interest to the community.
Although only 7 per cent of the respondents mentioned direct livestock market information as being important, security (30 per cent), grazing resources (20 per cent) and livestock health (7 per cent) are all part of livestock market information in a broader sense. Access to relevant information at the livestock markets in different areas may make it possible for producers to sell their animals at a time and place where they are likely to receive better prices at the lowest cost. In addition, knowledge of livestock health may go a long way in facilitating the protection of livestock well ahead of any outbreak of disease and the resultant heavy losses. Similarly, information on livestock marketing can be useful in assessing and predicting potential disasters such as droughts, and hence give an indication of possible future problems.

### Table 4.3

<table>
<thead>
<tr>
<th>Information issues</th>
<th>Number</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security-related</td>
<td>9</td>
<td>(30)</td>
</tr>
<tr>
<td>Common grazing resources</td>
<td>6</td>
<td>(20)</td>
</tr>
<tr>
<td>Settlement of disputes</td>
<td>6</td>
<td>(20)</td>
</tr>
<tr>
<td>Livestock marketing (auctions, prices, etc.)</td>
<td>2</td>
<td>(7)</td>
</tr>
<tr>
<td>Livestock health</td>
<td>2</td>
<td>(7)</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>(16)</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Source: Author’s survey

Early warnings on impending disaster related to livestock loss and food insecurity may be discerned from the behaviour of the livestock markets, taking account of price trends as well as the types of livestock in the markets. A sustained decline in livestock prices over an unusually long period may be an indication of a crisis for pastoralists because persistent low prices deplete the pastoral herds much faster. As the sale of livestock to purchase foodstuffs is still needed, more sales take place to allow for the acquisition of the same food requirement. This is particularly true for those households most dependent on purchased foodstuffs such as maize meal, tea and sugar, and those that have few or no alternative sources of income. The type of animals brought to the market for sale may also point at an impending scarcity and act as a warning of shortages and potential famine. For instance, pastoralists do not sell female breeders, lactating females and female immatures (future breeders) unless they have exhausted all other saleable stock in their herds. An unusually high number of animals from these categories could therefore signal a crisis and such a warning would enable policy makers to respond in good time to mitigate the effects. Thus, declining livestock prices as well as increasing sales of female breeders and lactating animals would be an indication of food insecurity. An efficient livestock market information system might therefore play a role in enhancing food security in pastoral areas.

Dissemination of information on livestock markets has a number of problems not the least of which is the need to guarantee that the information is accessible to the target audience and to ensure that the information is in a form that can be understood and used
by the users (Shepherd 1997). Although radio ownership as such is low, information carried over the radio reaches a much larger population. However, the costs associated with broadcasting market information increase with an increase in airtime resulting from the need to broadcast in a number of local pastoralist languages. Another key problem associated with market information is a question of relevance, in terms of market place and the time the price relates to. Should the prices being broadcast be those of the main regional markets or those at the small markets or those of both categories of markets? The issue of relevant prices is a problem that needs solving before embarking on effective market information gathering and dissemination. Seasonal differences of market information introduce yet another dimension. Given the poor security situation, poor infrastructure and long distances between markets, pastoralists are likely to be more attracted to the markets nearest to their settlements if the availability of livestock buyers in such markets is confirmed. In the absence of such information, they tend to take their animals to the large markets where there is always someone to buy them. The time lag between when the information is collected and when it reaches the pastoralist also needs to be considered. Other problems are associated with low literacy levels, appropriate broadcasting times and the optimal mix of media to maximise the dissemination of information.

Conditions for increased livestock marketing

Assuming that pastoralists will benefit from commercialisation, reliable and timely livestock market information is an important ingredient in increasing livestock commercialisation, but only one of a number of necessary conditions for attaining that goal. Among the other important necessities is the development of livestock infrastructure such as dipping facilities to improve livestock health, and routes for the animals to be trekked or trucked. Northern Kenya and Garissa District in particular have been faced with poor infrastructure since the colonial period which has acted as and still remains an impediment to increased livestock marketing as well as to trade in livestock products. Livestock prices have often been distorted through government intervention by way of quarantines and restrictions. Attractive prices for livestock are also important in enabling pastoralists to decide whether to sell their animals or withhold them from the market, especially for those who may not have to sell for survival. Of course, this excludes periods when the pastoralists have no alternative but to sell due to stressful circumstances and a lack of alternative sources of income. While commenting on the importance of attractive livestock prices as a basis for increased sales of animals, Kerven (1992:13) stated that:

Increased voluntary marketing by pastoralists of their livestock is dependent as much as anything else, on increasing the exchange value of livestock and their products in relation to the use (consumption) value, allowing for seasonal differences.

For the pastoralists to tap the benefits of increased exchange values, they need to have relevant information on livestock markets. In the absence of such information, it can only be hoped that the pastoralists will know and respond to high exchange values. Other than the attractive prices as a stimulus for increased livestock marketing, the issue of security plays a dominant role in the expansion of the livestock trade in Garissa District as it does
in the whole of north-east Kenya. In the absence of safe and secure routes for livestock to the markets as well as safe ways of carrying any cash proceeds back to the producers' settlements, it is unlikely that livestock commercialisation will improve substantially even if all other conditions were to be favourable. Hence the need to improve the security situation as a major component of enhancing livestock marketing.

**Concluding remarks**

The role of the public sector in livestock market information, both in collecting as well as disseminating the information, should be important. This is because of the amount of resources required to generate effective livestock market information. The absence of the government in such a process will favour large-scale traders who have the resources to collect their own market information, and will contribute to market imperfections through (trader) monopolisation of market information. This in turn, may also lead to the exploitation of the pastoralists who lack the same market information. The present role of the government in providing market information in the livestock sector is either minimal or non-existent, especially in Garissa District.

In marketing their animals, the pastoralists utilise various marketing channels, ranging from sales at the homesteads to small-scale traders, to direct sales to consumers within the neighbourhood as well as in more distant markets. There may be a relationship between, on the one hand the distance, the number of animals (size of flow) and the size of the end market, and the development of livestock marketing channels on the other. Livestock in Garissa District are sold in the small market centres in rural areas, at divisional markets, at the regional market of Garissa District as well as in the main national markets, mainly in Nairobi and Mombasa. While the small market centres in the district act as collection points, the main regional market of Garissa draws animals from as far away as Somalia and other districts in the region, Wajir and Mandera.

All the actors in the livestock trade, including the producers, require relevant, timely and cost-effective market information. The Somali were found to rely on traditional methods and the government administration for market information and other general information regarding the livestock sector, although the role of the government as a source is minimal nowadays. Some of the common channels through which they pass on information include farin and sahan, community elders, and itinerant travellers, with varying degrees of importance. Within the Somali community and between them and their neighbours, they often send and/or receive information on livestock-related issues including livestock marketing and livestock health. With reliable market information, ample security and appropriate infrastructure, it would be expected that the Somali pastoralists could respond more directly to market developments.