Community-Based Animal Health and Participatory Epidemiology Unit
Pan African Programme for the Control of Epizootics
Organization of African Unity/Interafrican Bureau for Animal Resources

An Audit of the Livestock Marketing Status in Kenya, Ethiopia and Sudan

(Volume I)

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Objectives of this Document

This study was initiated and financed by the CAPE unit of OAU-IBAR's PACE Programme on the assumption that market development is key to the success of other development programs in pastoral areas. The study focuses on Kenya, Ethiopia and Sudan, where livestock marketing constraints and recurring droughts are adversely impacting the livelihoods of pastoralists. The objectives of this study are: (i) to gain a better understanding of how the existing livestock marketing systems function in these three countries; (ii) identify key constraints and potentials in the systems, and (iii) develop a regional livestock marketing program, to be implemented by OAU-IBAR and its partners, to redress some of the key constraints to livestock trade.

The study is presented in two volumes. The first volume (this paper) provides a simple descriptive account of how livestock, meat and hides and skins are marketed in the three countries. The second volume will focus on analyzing the major issues involved with the resultant recommendations being incorporated into the Marketing Program mentioned above.

An attempt has been made, in this paper, to focus on similar marketing issues in each country. The findings of such issues, where possible, are also presented in the same order for each country so that comparisons can be made between the countries. Where there are variations in the order, this was because either the information was not available in the particular country or because the particular country operates in a different system than the other/s.

Methodology

Information was gathered from key informants in the three countries. These include: pastoralists, livestock and meat traders/exporters; skin and hides traders/exporters; livestock traders/exporters associations, slaughter houses and butchery owners;
Key members in relevant government institutions such as Ministries of Agriculture (Department of Veterinary services, Livestock Marketing Departments/ Authorities), Customs, Ministries of Industries, private or Government owned Commercial Banks, Insurance Companies, Ministries of Foreign Affairs/ Foreign Trade, Airline Companies, Transitors etc; and, staff in selected NGOs and other bilateral/international organizations.

This was followed by data collection from relevant institutions such as Customs, National banks, Departments of Veterinary Services etc., through two local consultants (one in Kenya and another in Ethiopia). Finally, a literature review of relevant materials was used for putting this paper together. Certain information may be lacking for Sudan due to the author's field trip coinciding with the Id holiday, resulting in the unavailability of some key informants (such as the livestock exporters association) at the time.

Note: The views and opinions expressed in this paper are those of the authors.

Currency Equivalents
(2002)

US$1 = 77 Kenyan Shillings (Ksh)
= 8.65 Ethiopian Birr (Br)
= 260 Sudanese Dinar (SD)

(Notes:

1) Though the Sudanese Dinar (SD) is the official currency, the old Sudanese Pound (SP) is still universally referred to in everyday transaction. Please note that 1 SD has been calculated as the equivalent of 10 SP (or US$1 = 2,600 SP) in this report.

2) The Ethiopian calendar year overlaps into two European calendar years. Accordingly, data from Ethiopia are provided in two European years.

Abbreviations

Kenya

ADC	Agricultural Development Corporation
AFC	Agricultural Finance Corporation
ALMO	African Livestock Marketing Organisation
ALRMP	Arid Lands Resources Management Project
ASAL	Arid and Semi Arid Lands
DVS	Department of Veterinary Services
KMC	Kenya Meat Commission
KLMC	Kenya Livestock Marketing Council
MoARD	Ministry of Agriculture and Rural Development
LMD	Livestock Marketing Division

Ethiopia

EARO	Ethiopian Agricultural Research Organisation
EIA	Ethiopian Investment Agency
LMA	Livestock Marketing Authority
MOA	Ministry of Agriculture
MEDAC	Ministry of Economic Development and Cooperation
SNNP	Southern Nations, Nationalities and People

Sudan

ARB	Animal Resources Bank
ARSC	Animal Resources Services Company
LMMC	Livestock and Agricultural Development Company
MoAR	Ministry of Animal Resources
MoFT	Ministry of Foreign Trade
MII	Ministry of Industries and Investment

General

CAD	Cash Against Document
CBPP	Contagious Bovine Pleuroneumoni
CIF	Cost, Insurance, Freight
FAO	Food and Agriculture Organisation
FOB	Free on Board
LC	Letter of Credit
OIE	Office International des Epizootics
WTO	World Trade Organisation

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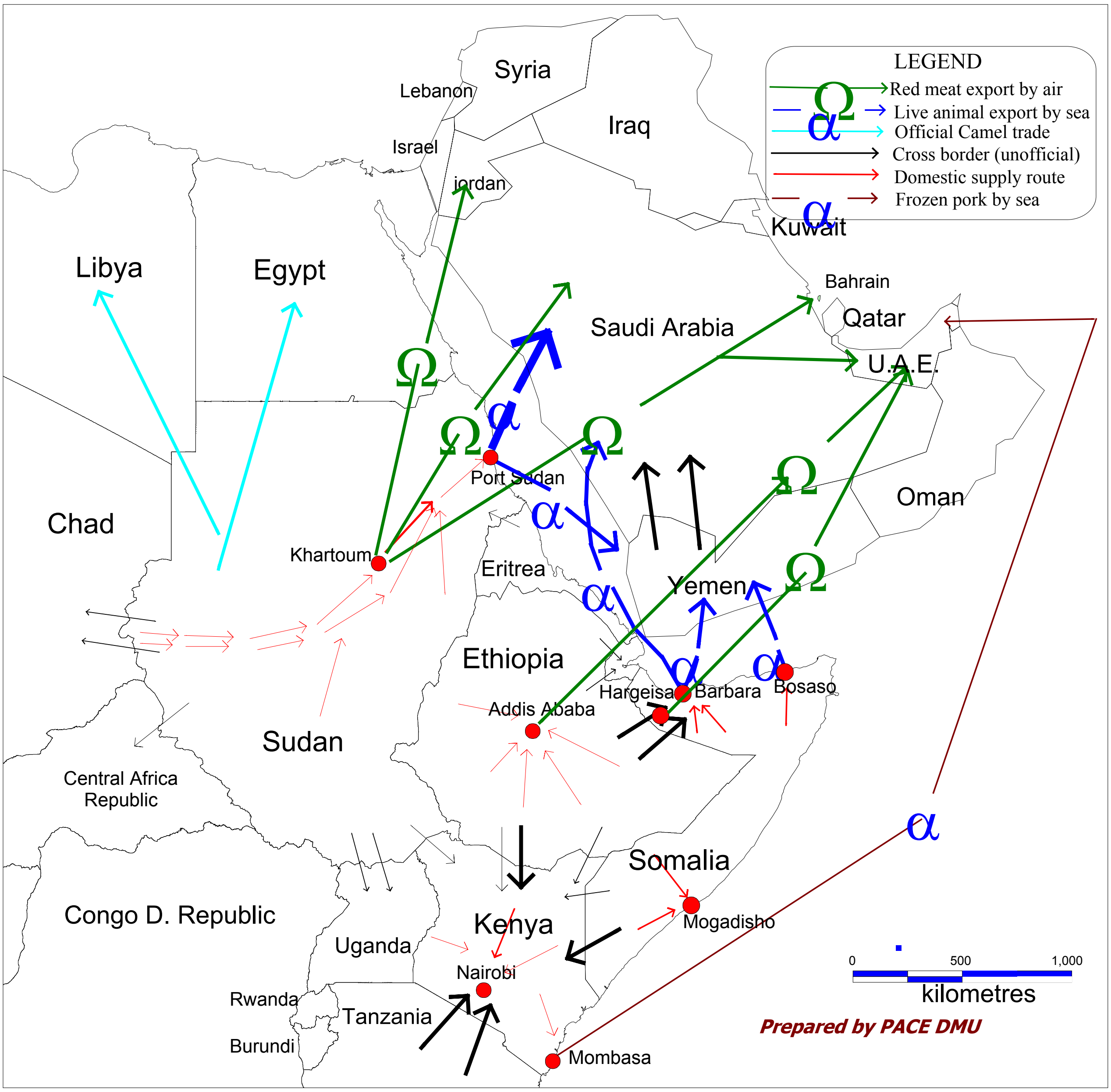


Figure 1 Domestic, Cross-border and Official Export Trade Routes

Executive Summary

Annual red meat production is estimated at 362,815 MT in Kenya of which beef constitutes about 286,000MT. Pastoral areas supply two-thirds of the national beef demand with 46% coming from within Kenya and 26% supplied through cross-border trade. Ethiopia's annual red meat production is estimated at 444,500MT, of which beef accounts for 65%, mutton around 19%, chevron (goat meat) 13% and camel meat 2.5%. Sudan estimated its red meat production at 1,578,000 MT[1] for 2001 with an estimated off-take rate of 19.9% for cattle, 44.4% for sheep, 38.5% for goats and 16.4% for camels in the same year

Livestock prices drop down during droughts and peak up during holidays (Christian, Muslim or other public). Yet, the price of meat has remained more or less constant in the major cities of Sudan, Kenya and Ethiopia in the last five years. This implies that butchery owners control the meat market. In fact, they are the most powerful group in the livestock marketing chain followed by Middlemen, who act as the interface between livestock traders and butchery owners. The two groups control the price of livestock at major domestic markets and by extension the volume of the national red meat consumption in the three countries.

The producer's share of the retail price shows a declining trend over time particularly for cattle. In Sudan, due to a convoluted livestock marketing chain that involves too many middlemen in the system, livestock prices in the terminal markets end up 2 to 4 times higher than that of the producer's price. In Kenya, the producer's share varies between 47 and 52% depending on the butchery outlet. In Ethiopia, the producer's share has declined from 76% in 1983/84 to 55% in 1995 and to below 50% at present. Factors attributed for this state of affairs include the followings: i) the consumption level of red meat has not increased per capita or proportionally to the human and livestock population growth at the prevailing price of meat due to the stagnation/decline of the economy; and ii) the domestic livestock markets have become increasingly supply driven due to the decline in live animals and meat exports for various reasons.

Transport constitutes a major cost factor in livestock trading. In Kenya, 25 to 40% of the total cost of livestock brought to terminal markets from the Northern pastoral areas is accounted to transport, since truck owners charge more for livestock than consumer goods. As a result, transport costs determine the level of profits accrued by livestock traders. Those traders with their own means of transport accrue the highest profit margin from high turn over volume and savings in transport costs. Traders who trek their animals either by choice (to save on transport costs) or by default (due to inaccessibility) tie their working capital for far too long on 'inventory on hoof' and may not be able to do more than few transactions in a year due to the long turn around time[2]. In many cases, it is not

[1] Many suggest that this figure is highly inflated.
[2] It takes 75 days to trek cattle from West Darfur to Khartoum; Most cattle are also trekked to Mombassa from the Northern and N. Eastern districts.

certain whether the perceived benefits from trekking would outweigh the costs of trucking particularly if the trekking involves more than two weeks of journey[3]. For example, in Ethiopia, an average weight loss of 8.9% was recorded for cattle over a 7-8 day trek in the highland areas.

Livestock are the most repeatedly (and perhaps the most highly) taxed agricultural commodity in the region. In Sudan, livestock traders pay taxes and transit fees in about 20 places en route to the terminal markets / final destinations. In Ethiopia, livestock are taxed a number of times as transit commodities within the country, the amount paid per head varying from place to place. In both Sudan and Ethiopia, transit fees and taxes are collected in a bid to enrich the coffers of regional governments, despite regulations that livestock should only be taxed at the point of origin. Livestock are less repeatedly taxed in Kenya. Nevertheless, the amount paid in one go could be as high as 600 shillings per head of cattle. Ironically, in all the three countries, livestock taxes and transit fees collected by the respective councils are not used to improve the physical structure or the efficiency of the livestock markets.

Available evidences do not support the perception that cross-border livestock trade takes place as a result of better price offers than the home markets. The fact is cross-border markets occur (i) because of the excess number of livestock in the source country more than what its domestic markets can absorb and/or (ii) because of proximity to the cross-border rather than to the domestic markets. Otherwise, the price of beef is more or less similar in Nairobi and Addis Ababa (except in isolated cases lasting short durations) to justify that cross-border markets occur for reasons of better price offers. Cross-border trade thrive if the source country is not involved in large-scale live animals and meat exports despite having significant livestock resources (such as Ethiopia) or if the existing export markets are disrupted for some reasons (such as Somalia). In the first case, the cross-border trade from Ethiopia is directed towards Kenya and Somalia for the simple fact that livestock from the highland areas of Ethiopia dominate the major secondary and terminal markets. Livestock from pastoral areas, by and large squeezed out of the domestic markets, have to be sold at cross-border markets. The second case (disruptions of export trade) is signified by the flow of livestock from Somalia into Kenya and in the reverse direction when the export trade resumes in Somalia. Cross-border markets between South Sudan and Kenya and between South Sudan and Uganda take place because of proximity, among other things.

The gradual integration into the cash economy and the recurrence of droughts at short intervals are increasingly pushing pastoralists to sell more animals than before. However, the intent to sell more animals has not been matched by a corresponding growth in per capita consumption of meat due to the stagnation of the economy. Domestic market saturation, at the prevailing price of meat, and more importantly Kenya's and Ethiopia's near exclusion from the export markets has effectively limited the pastoralists' ability to sell more livestock than is currently the case. Sudan, on the other hand, is actively engaged in the export market generating some $170 million annually from livestock and meat exports.

[3] This could vary with the seasons.

The closure of the KMC has effectively curtailed the export of canned/frozen meat from Kenya. Private attempts to set up small export standard abattoirs have not also materialized for various reasons. Despite the privatization of formerly state-owned industrial abattoirs, Ethiopia has not exported canned meat for some time perhaps due to high production costs as compared to international market prices. Ethiopia's on-going chilled beef/mutton and live animals exports is minimal when compared to its livestock resources. The poor export performance of Ethiopia and Kenya has in turn led to the deterioration of holding grounds, stock routes, watering points, quarantine stations and market yards built at considerable expense in the past. The state of such infrastructure is such that both countries would require substantial amount of funds to rehabilitate them for export services. This is also true for Sudan particularly between the primary and the terminal markets, though the Kadero and Port Sudan quarantine stations are in good conditions.

Tannery and leather industries find themselves in precarious situations in all the three countries. Firstly, there are more tanneries than the locally available volume of raw hides and skins. Supply shortage is exacerbated in Kenya and Sudan due to the export of raw hides and skins. Yet, semi-processed skins and hides bring in nearly three times as much in foreign exchange compared to raw hides and skins, for example, in Sudan. Cheap and subsidized imports of leather products and articles are also out-competing the local leather processing industries and forcing them to close down in Kenya, Ethiopia and Sudan. The tannery industry is fraught with cash-flow problem. It is difficult to envisage how these industries can survive for long unless the respective governments take some critical measures to safeguard them from total collapse.

The livestock sector contributes about 3.3% of the total GDP in Kenya; 20% of the total GDP in Ethiopia and 20% of the agricultural GDP in Sudan (including $170 million in foreign exchange). Despite such significant contributions to the national economies of each country, the sector has received less than 3% of the recurrent agricultural expenditures in Ethiopia and only between 1.3 to 2% of the total recurrent agricultural budget in Kenya for the years 1993/94 and 97/98[4]. Sudan comparatively allocates a higher proportion of its recurrent budget to the animal health sector but still falls far below satisfactory. In all cases, resource allocations for livestock and animal health services do not commensurate at all with the revenues generated by the sector.

The present status of the livestock markets in each of the three countries necessitates a complete review of the situation in order to formulate goal-oriented strategies. The roles and responsibilities of governments, trade and producers associations, the private sector and other civic associations need to be reassessed with a view to hand over most of trade related activities to the private sector for sustainability while maintaining the regulatory and supervisory roles of governments. Governments should also take the courage to admit that the livestock sub-sector has been ignored for far too long and take new initiatives to promote the productivity of the livestock industry.

[4] Tambi and Maina, OAU-IBAR, 2000.

I Kenya

1.1 Livestock Resources and Off-take

Kenya's livestock population is estimated at 12 million head of cattle (of which 3.2 million are in dairy herds), close to 20 million shoats and 1 million camels[5]. Figures compiled by LMD[6] indicate slight yearly increases of the beef cattle population between 1997 and 1999, i.e., – 8,772,000 in 1997, 8,795,000 in 1998, and 8,953,000 in 1999 but in 2000, the figure was 8,058,000. It is presumed that the drop in the year 2000 was as a result of the drought.

LMD estimates red meat production at approximately 362,815 metric tons (MT). The bulk of this is beef mainly from ASAL areas. A small proportion of beef supply also comes from the dairy herds. The value of annual red meat production is estimated at Ksh 43.2 billion. Within this the value of beef is estimated at Ksh 34.4 billion, combined goat meat and mutton at Ksh 8.2 billion and camel meat at Ksh 0.66 million.[7] Beef production was estimated at 286,000 MT in 2000, with 30% coming from the dairy herd. Trends show an increase for the overall slaughter figures (estimated at 10-14%), from some 877,000 head in 1997 to 967,000 head in 2000. However, beef production trends from pastoral herds in Kenya indicate a decline from 131,580 MT in 1997 to 127,597 MT in 1998 and 125,542 MT in 1999 before peaking up at 130,540 MT in 2000 (presumably due to increased distress disposal). Beef production from dairy herds, commercial and group ranches show a similar pattern of decline for the first three years from 78,948 Mt in '97 to 76,378 in '98 and 75,480 MT in '99 before peaking up to 81,141 MT in 2000.

However, according to the LMD, nearly all the increase in beef production for the period amounting to some 18,167 MT (from 268,278 in '97 to 286,305 MT in 2000) comes mainly from the cross-border trade. Yearly increases in cross-border beef supplies indicate a progressive trend from 57,750 MT in '97 to 66,025 MT in '98, 72,628 MT in 99 and 74,624 MT in 2000. According to these figures, combined outputs of beef from pastoral areas (from within Kenya and through cross-border trade) supply a little over two-thirds of the domestic beef requirement. Within these, some 46% of the beef production came from pastoral areas of Kenya while about 26% was supplied through the cross-border market. Beef production from dairy herds supply a little less than one-third of the national demand. The figures emphasize the growing importance of the cross-border trade, without which, the domestic beef demand may not be met at the prevailing off-take rate from Kenyan herds.

The LMD estimates the off-take rate for shoats at 25%[8] from an estimated 21.08 million shoats in the country (comprising 6.9 million hair sheep, 1.1 million wool sheep, 12.95 million meat and 0.04 million dairy goats). Estimates of mutton and goat meat production

[5] Ministry of Agriculture and Rural Development, January 2001
[6] Marketing of Livestock and Livestock Production in ASAL areas, Livestock Marketing Division, unpublished
[7] Ibid
[8] In another paper it is stated as 14%.

indicate a declining trend from 79,080 MT in '97 to 75,709 MT in 98, 68,786 MT in 99 and 68,269 MT in 2000. This figure is based on an assumption of 15 Kg Cold Dressed Weight (CDW), which could be a bit exaggerated. Figures for the thriving cross-border trade in shoats (particularly through the Northeastern districts) were not available.[9] Demand for red meat is expected to grow by 15,000 MT every year for the next five years.[10]

1.2 The Domestic Markets

The domestic market consists of primary, secondary and the terminal markets. The main suppliers of stocks to Nairobi, Mombassa, Malindi and other terminal markets are as follows:

Species	Source districts
Cattle	Marsabit, Moyale, Laikipia, Garissa, Kuria, Kajiado, Narok, Machakos, Isiolo, Nakuru, Migori, Mandera
Shoats	Marsabit, Moyale, Isiolo, Wajir, Garissa, Kajiado, Turkana, Machakos, Mandera
Camels	Marsabit, Garissa, Isiolo, Moyale

However, the market sheds for livestock supplies are increasingly expanding across the border. Nearly all the cattle sourced at Moyale and some of the cattle and shoats purchased at Mandera market originate from the Borana and Somali regions of Ethiopia. Small numbers of cattle originating from Eastern Equatoria of South Sudan and the Southwestern part of Ethiopia are routed to Eldoret and Nairobi through Lokichogio and Lodwar, albeit intermittently. A significant proportion of the cattle in Garissa market come from Somalia. Similarly livestock from Tanzania are routed through Kuria to Migori and Bisil in Kajiado and then to the terminal markets in Nairobi. Supplies from Machakos and Laikipia consist of mainly finished animals from the ranches in these areas.

The slaughter stock is transported to slaughterhouses by either truck or on hoof. Veterinary permits are necessary for the movement of animals in all cases and the DVS encourages transportation by truck as a means of disease control since the Northern, Eastern and North-Eastern provinces are considered high risk areas for CBPP. However, the effectiveness of the movement permits in controlling disease is questionable. For example, despite veterinary officials claims of higher CBPP prevalence in Ethiopia (than in Kenya) permits are given for as many as 20 truckloads of cattle (between 360 and 400 head) per day from Moyale to Nairobi. Cattle from Tanzania are sometimes smuggled during the night into Kenya.

[9]However, Richard Kariuki provides a slightly different picture. He estimates the annual meat demand for Kenya at 304,150 tons and a wider off-take range of between 6-14% for cattle and 4-10% for shoats from pastoral areas. He also estimates a significantly lower beef contribution from pastoral areas at 19%.
[10] Development Proposal for the Arid and Semi Arid Lands, LMD, Unpublished

Trekking is the favourite mode of transport particularly for livestock from pastoral areas due to high transport costs. Trucking from such areas occurs more as a security measure than free choice. Even then livestock are trucked over long distances from the North and Northeast in a way that entails considerable weight loss. For instance, livestock from Moyale are not fed or watered despite two overnight stops (at Marsabit and Makutano) en-route to Nairobi. Occasionally, hay may be thrown on the truck when it is available for purchase on the roadside. Idrisi, a former live animals exporter, estimates the weight loss to be between 5 and 7 Kgs/head when cattle are trekked from the boma to the market by the producer and a further 15-20 Kgs/head between the point of purchase and the terminal market. He adds, "Sadly, this loss is borne by the producer as traders take this loss into consideration when negotiating the price.[11]"

Transport has always been a major cost factor in livestock trading varying for example, between 10,000 and 30,000 shillings per lorry-load from Naivasha, Garissa or Namanga to Nairobi, irrespective of the number of animals on the truck. The hiring cost for a 10-ton truck from Nairobi to Moyale is about 35,000 shillings. However, the same capacity truck from Moyale to Nairobi would cost between 50 and 70,000 shillings (depending on the livestock market price in Nairobi). This means a cost of between 2,500 and 3,500 shillings/head or between 357 and 500 shillings per shoat for animals trucked from Moyale.

Thus, the ratio of transport costs to total costs of operation determines the margin realized by livestock traders. For example, there are livestock traders in the North and Northeast who own commodity shops plus a truck or two. The trucks are used for transporting commodities and livestock in the opposite directions. Such traders save a lot in transport costs. At the same time, many of the livestock traders do not own trucks (though some may have shops). Such traders incur considerable transportation costs and realize lesser margin on a truckload basis than those with their own means of transportation. Findings from a study undertaken by Tufts University[12] on the cross-border livestock trade between South Sudan (Narus and Natinga) and Nairobi indicate that the ratio of transportation cost in the marketing margin of 12 livestock traders varied between .07 and .48 per kilogram live weight for cattle (the higher the ratio, the lesser the margin).

Stocks change hands either once or twice before reaching the terminal markets. In the former case, stocks bought at primary markets are taken directly to the terminal markets (example, Moyale to Nairobi). In the latter case, stocks are sold in secondary markets before they reach the terminal markets (example, from Mandera/Elwak to Garissa and then to Nairobi or from Turkana to Eldoret and Nairobi). In few cases, stocks may change hands three times (example, from Mandera/Elwak to Wajir to Garissa and then to Nairobi or Mombassa). Livestock traders in pastoral areas operate in a variety of ways. Some buy young cattle for 1,500 - 3,000 shillings, keep them for about two years and sell them for 9 –12,000 Ksh in Garissa or Isiolo markets. Stock traders based in Garissa may also buy animals from Wajir, Elwak or Mandera and trek them to Garissa market. Butchers /

[11] Personal communication with Idrisi

[12] Guvele C and Lautze S: Unofficial Cross-Border Livestock Exports from Southern Sudan to Kenya, Feinstein International Famine Center, 1998

middlemen from Nairobi buy cattle from Garissa or Isiolo markets and truck them to Nairobi. At the same time, Somali traders from Garissa or Mandera (considered as tycoons) trek large number of cattle to Mombassa and Malindi through Bodhai allowing the animals to graze and put on weight in the process (for a grazing and watering fee of 50 shillings/head). These traders may also rent ranches for a certain period to fatten the animals before disposing of them (there are about 35 ranches between Nairobi and Mombassa alone[13]) in the terminal markets. Despite the proximity of the Orma and Mucamba livestock traders to the coastal markets, the Somali traders remain the major suppliers.

Traders in general complain of taxes they have to pay at source and en-route to the terminal markets. For example, customs charges and county council taxes in Moyale add up to 600 Ksh/head. With the 'extras' on the roadblocks, the total may come to 700 Ksh/head (usually, such 'extras' are taken care of by the transporters). Orma traders from Garsen pay a total of 200 Ksh/head (100 Ksh for the county and another 100 Ksh for auction fee) and an additional grazing fee of 100 shillings/head if the livestock were sourced outside of the county. Traders also complain about the many roadblocks especially in the North and Northeast. There are about 18 roadblocks between Moyale and Nairobi.

Livestock trading has been the domain of the private sector following the liquidation of the Kenya Meat Commission (KMC) and the exit of the Livestock Marketing Division (LMD) from the markets. This has led to the abandonment, underutilization and disrepair of the infrastructure developed by ALMO and LMD. The counties have also repossessed some of these infrastructures. Thus, of the 112 holding grounds and outspans, 52 are possessed by local county councils. The remaining 60 are in a state of disrepair. Of the 34 stock routes, only 16 are active (80% of which are in the Northern Rangelands). Stock routes below the Sanitary Corridor[14] are no longer used because of human settlements, preference for trekking and encroachment by squatters. Of the 34 water pans, 46 boreholes and 4 storage tanks in the holding grounds, less than 20% are currently functional due to lack of sufficient maintenance funds, change of use of holding grounds, etc[15]. However, some of the infrastructure such as holding grounds and livestock multiplication centers (in Isiolo, Marsabit, Wajir, Mandera, Samburu and Koibatek) have been recently rehabilitated and handed over to Management Boards or Users Associations.

Pastoralists and livestock traders are nostalgic about KMC and LMD, which provided them with guaranteed market for surplus stocks in the past. Many would like to see KMC in operation again but this remains unlikely. The loss of the export market for both live animals and chilled/canned meat has greatly reduced the total volume of off-take from pastoral areas. The domestic markets have become supply-driven and increasingly competitive to the disadvantage of the producer. Yet, meat prices have remained static in

[13] Interview with Dr Fazil, a private Veterinarian in Mombasa
[14] South of Turkana, Marsabit, Mandera, Wajir, West Pokot, Isiolo, Garissa, Tana River and Samburu districts.
[15] LMD, Marketing of Livestock and Livestock Products in the ASAL areas (unpublished)

the last few years perhaps as a result of the control of the butcheries by a cartel group. This situation has undermined the pastoralists' ability to sell stocks in normal times or as a coping mechanism in the advent of drought. Moreover, the share of cross-border livestock supplies to the domestic markets is increasing significantly. LMD estimates that the domestic markets absorb about 400,000 head of cattle/year originating from cross-border sources. This has led to some pastoralist groups being squeezed out of the domestic markets – for example, the Turkana.

1.3 The Terminal Markets

A number of terminal markets are located close to large urban areas. Kariuki's (2000) list of the terminal markets in Kenya include Nairobi, Nyahururu, Isiolo, Meru and Nyeri for the North-central axis; Kisumu, Kisii, Eldoret, Nakuru, Naivasha and Nairobi for the North- western axis; and Nairobi and Machakos on the Southern axis. The coastal terminal markets on the Northwestern and North-central axis and to a minor extent on the Southern axis (Kajiado). The largest of these terminal markets, Nairobi and Mombasa, are discussed below.

1.3.1 Nairobi

The following 11 slaughterhouses supply meat to Nairobi[16].

Slaughterhouse	Location	Main Species
Dandora	Njiru, Nairobi	Cattle
Nyonjoro	Dagoretti, Nairobi	Cattle
Hurlingham	Njiru/Ruai, Nairobi	Cattle
Kiamaiko	Kariobangi, Nairobi	Shoats
Dagoretti	Dagoretti, Kiambu	Cattle
Kayole	Kayole, Nairobi	Cattle
Kiserian	Kiserian, Kajiado	Shoats
Ngong	Ongata Rongai, Kajiado	Cattle
Olekesasi	Ongata Rongai, Kajiado	Cattle
Keekonyokie	Kiserian, Kajiado	Cattle
Mlolongo	Athi River, Machakos	Camels

On arrival at the slaughterhouse, the meat inspector (from the DVS) checks on both the movement permit and the condition of the animals before they are off-loaded into a terminal sale yard or *boma*. The average fees charged at various slaughterhouses are shown below. Middlemen/women (invariably referred to as butchers despite having no butcheries of their own) buy the animals and take them to a slaughterhouse of their choice (if there are many close by - e.g. Dagoretti has four). The service of these middlemen/women, in many cases, is limited to buying the animals from livestock traders, slaughtering the animals and selling the meat to butcheries thereby adding

[16] In addition, numerous slaughterhouses dotted between Nairobi and Namanga supply Nairobi butcheries. Usually butchery owners of Nairobi pick the meat from these slaughterhouses using hired vans/pickups. This saves them a lot in costs.

another loop in the marketing chain between the producer and the consumer. The middlemen might be described as wholesalers, though this may be a misnomer. There are 200 of them operating in Dagoretti market alone.

Table 1-1 Terminal Market Charges in Nairobi

	Charges (Kshs) per animal			
	Landing fee	Local council cess*	Meat inspection fee	Slaughterhouse fee*
Species				
Cattle	40	40	100	188 (130-250)
Shoats	15	16 (10-25)	25	63 (45-80)
Camel	40	40	100	100

*Indicates average charge; range is given in parentheses

The price of live animals at the terminal sale yard varies marginally depending on demand. Prices generally increase during Christmas, Easter and Ramadan, weekends that coincide with paydays, and when supply decreases due to the availability of green pasture in production areas. Prices fall during droughts because of excess supply.

There are three categories of butchers operating in the slaughterhouses in Nairobi. These are (a) butchers who operate their own butcheries, (b) butchers who slaughter stock on order, and (c) butchers who slaughter and wait for a buyer. The latter two groups act as middlemen / wholesalers. About 100-120 of them may operate on a given day in Dagoretti alone, each slaughtering between 1-3 head of cattle. Their sheer number makes them a powerful group and as there are no facilities for livestock to stay overnight in the markets, they play a lead role in determining the price of the day. With slow deliberations and the advantage of time on their side they make the best deals for themselves as the day progresses since livestock traders have no choice but to sell their animals. In fact, these groups are critical for the prevailing price of meat at any given time in most of the butcheries in Nairobi since the margins they make when selling meat to the butcheries will eventually determine the price at which butcheries sell meat to consumers. The groups operate in a cohesive manner and apply a more or less uniform margin rate depending on the type of meat and the class of butchery they sell the meat to. This mode of operation has kept the price of meat more or less constant in Nairobi for the last few years despite fluctuations in supplies. The groups benefit from a law (probably dating from the colonial period) mandating that livestock from high-risk areas (read pastoral areas) have to be slaughtered immediately.

The carcasses are usually transported from the slaughterhouse to the butchery shop by either a meat van or a bicycle. Meat vans usually serve the high and middle class butcheries while bicycles mainly serve the slum areas. Meat vans charge Kshs 500 per carcass while bicycles charge between Kshs 100 and 150 per 50kgs of meat. Every meat transporter must obtain a meat transportation license from the DVS after paying Kshs 20 per license.

The meat trade is both vertically and horizontally integrated. For example, some livestock traders sell directly to butchers, while some livestock traders and butchers also own butcheries. The margins vary with the level of transaction as indicated in the table below.

Table 1-2 Average gross margins at different levels of transaction in Kshs

Change of title from:	Buying price[17]	Selling price	Costs per animal	Average gross margin[18]
Producers to livestock trader	Kshs 9,000-11,000 (300-450kg live weight)	11,000-13,500	Cess – 40 Transport –1,000 Feed –100 Labour –100 Landing fee - 40	2,500 per animal
Livestock trader to middleman (butcher)	Kshs 11,000-13,500 Or Kshs 63.0-74.9/kg DW for a carcass of 150-220kg Live wt: 300-450kg	High grade beef: Av.= 120/kg	Inspection fee–100 Slaughterhouse fee – 130-250	51/kg
	Kshs 7,500-9,500 Or Kshs 65.4-84.1/kg DW for a carcass of 90-120kg Live wt: 180-290kg	Standard grade: Av. =110/kg	”	40/kg
	Kshs 4,500-6,000 Or Kshs 52.5-69.3/kg DW for a carcass of 70-120kg Live wt: 150-250kg	Commercial grade: Av = 100 Kg	”	39.5/kg
	Kshs 3,500, -5,000 Or Kshs 48.6-62.2/kg DW for a carcass of 60-110kg carcass Live wt: 130-230kg	Commercial grade: Av.= 80/kg	”	24.1/kg

The high, standard and commercial grades of beef sold through the various butcheries of Nairobi have the following common characteristics.

High Grade: Uniform fat cover; mainly of exotic breeds less than 5 years old. Served I high-class butcheries such as Gilianis, Springchoice, Westend, Meat Masters etc.

Standard grade: Medium fat cover; aged 5-6 years local breeds. Served in middle and lower class butcheries e.g. Yamugwe, Thoora, Good Times, Kawangware and Kariobangi

Commercial grade: No fat, very lean to body; local breeds of over 6 years of age. Served in extra low class butcheries in slums and institutions (schools and hospitals).

Offal is sold in extra low class butcheries for an average price of 800 shillings per entire offal.

[17] Livestock prices were depressed at Nairobi at the time the data was taken.
[18] Gross margins are averaged and indicative. They shouldn't be considered as the standard margin.

1.3.11 Classes of butcheries in Nairobi

Generally, one can categorise butcheries in Nairobi into four major classes based on the income class of the clientele. These are high, middle, low and extra low classes. This classification is however not rigid and neither is it recognised by the licensing agent, the Nairobi City Council.

High-class butcheries serve high-income estates such as Muthaiga, Karen and parts of Westlands. They are distinguishable from the other classes in that they sell meat in special cuts. Examples include Gilani, Meat Masters and Westend butcheries in Westlands and Meezan Enterprises at Adams Arcade along Ngong road. These butcheries mainly obtain carcasses from Hurlingham, Kiserian and Cooperative (in Dagoretti) slaughterhouses. The animals slaughtered in these slaughterhouses are usually well-bred indigenous or exotic stock, from commercial ranches such as Kisima, Ol Pejeta, Marula and Maranya. These animals usually have an average live weight range of between 300 and 450kgs. High-class butcheries serve a small portion of the red meat market, mainly high-class hotels and restaurants in the city, and wealthy individuals. Some of these butcheries also sell game meat. They mainly buy the high grade of beef, which they sell in special cuts such as T. Bone, Fillet, Sirloin, etc at an average price of Kshs 308 per kg. . The gross margin made by this category of butcheries is Kshs 188 per kg.

Middle class butcheries serve middle-income estates such as Buruburu, Kayole, South B/C, Nairobi West, Komarock, Ngumo, Parklands and Umoja. A few of these butcheries sell meat in special cuts but these are not as diverse as those sold in high class butcheries. Examples include Yamugwe and Thoora Meat Supply in City Market and Good Times Butchery in Buruburu. Their main sources of carcasses include Dagoretti, Dandora (Njiru) and Mlolongo (for camel meat). They mainly buy the standard grade of beef, which they sell at an average price of Kshs 202. per kg. On average, this category of butcheries makes a gross margin of between Kshs 92.8 per kg.

The low class butcheries serve the lower income estates such as Kawangware, Kangemi and Kariobangi. This class of butcheries mainly buys the standard grade of beef with a small proportion of the commercial grade. They sell it at an average price of Kshs 170 per kg. Their main sources of carcass include Dandora, Nyonjoro (in Dagoretti), Kayole, Kiserian and Ngong slaughterhouses. The gross margin made is Kshs 70 per Kg..

The extra low class of butcheries services the slums of Kibera, Mathare, Korogocho and Majengo. This class specialises in offal and commercial grade of beef. Sale of uninspected carcases and meat from animals which people would consider inedible if they knew what it was, is not uncommon. Most of these butcheries are not licensed and, strictly speaking, they are merely meat kiosks. A kg of beef sells at an average price of Kshs 120. Their gross margin is rather low at Kshs 40 per kg on average.

Table 1-3 Estimates of margins for different classes of butcheries in Nairobi (Kshs/kg)

Class of Butchery	Selling price	Buying price	Average margin [19]	Estate Served
High	308	120	188	Muthaiga, Loresho, Westlands, Lavington, Kileleshewa, Karen, Hurlinghum
Middle	202	110	92	Buruburu, Kayole, South B/C, Nairobi West, Komarock, Ngumo, Prklands, Umoja
Low	170	100	70	Kangemi, Kawangware, Kariobangi, Eastleigh, Dandora
Extra low	120	80	40	Slums- Kibera, Mathare, Korogocho, Majengo

By December 2001, records at the Nairobi City Council Licensing Department indicated that there were 483 licensed butcheries in Nairobi. About 226 of these were categorised as "Butcheries", i.e., butcheries licensed to sell meat only. The other 257 were categorised as "Butcheries and Supplementary", meaning that they could also serve as bars, restaurants or other eating places besides selling meat. According to the City Council officials, the 483 butcheries represent one-eighth of the total number of butcheries in Nairobi. This gives a figure of 3,864 butcheries operating in Nairobi, of which 3,381 are estimated to be unlicensed. According to the Mombasa Provincial DVS, Mombasa has approximately 200 butcheries. This figure is inclusive of both licensed and unlicensed butcheries.

1.3.13 Type, number and prices of animals sold (1996-2000)

These data was derived from the number of animals slaughtered in various slaughterhouses in Nairobi and Mombasa. It is worth noting that the city of Mombasa does not have its own slaughterhouses save for two that slaughter poultry. It relies on slaughterhouses in neighbouring Kwale and Kilifi districts. The figures are derived from the meat inspection reports of the DVS.

Table 1-4 Number of livestock slaughtered in Nairobi (1996-2000)

	Year					
Species	1996	1997	1998	1999	2000	*TOTAL*
Cattle	28,641	30,053	32,801	35,120	38,998	165,613
Goats	28,923	22,741	14,279	15,600	29,378	110,921
Sheep	5,859	9,033	4,805	6,790	15,622	42,109
Camels	72	72	199	16	33	392
TOTAL	63,495	61,899	52,084	57,526	84,031	319,035

Source: Nairobi PDVS Meat Inspection Reports (1996-2000)

[19] These margins are averaged and indicative. They should not be taken as the standard margin made by butcheries all the time.

The above table indicates that there has been a steady rise in the number of cattle slaughtered in Nairobi with yearly increments of 5% in '97, 9% in '98, 7% in '99 and 11% in 2000. The increase in 2000 is more pronounced because of the drought that led to a significant decline in cattle prices. The numbers of shoats slaughtered show a marked decline for the years '97, '98 and '99 (except for sheep in '97) indicating an increasing supply-driven shift in consumption patterns to beef for the period. The figures for 2000, however, show a reverse trend in which the numbers of goats equaled the 1996 level while that of sheep increased three fold. This indicates that the shift towards beef consumption was only a temporary affair dictated by shortage of supplies rather than attitudinal changes. The increase in the supplies of shoats in 2000 is attributable to transport subsidies that were made available to livestock traders through drought mitigation activities. In general, the total numbers of animals slaughtered show a declining trend for 97-99 before the trend was reversed for the better in 2000. The number of camels slaughtered remains insignificant for the whole period. It should be noted here that the above figures do not include meat supplied from other slaughterhouses outside of Nairobi.

The prices of livestock marketed in Nairobi fluctuated widely across the four species over the 1996-2000 period (Table 1-5). Cattle prices increased significantly reaching twice the level of 1996 in 1999 followed by a sharp drop to that of 1996 level in 2000. Yet, there was a parallel increase in the numbers of cattle slaughtered in Nairobi for the period. A significant increase in the price of goats is observed in 98 and 99 with a downward trend in 2000. A similar, though proportionally less, pattern is also observed in the price of sheep for the same period. Price and supply level fluctuations for sheep and goats in the period show an understandable pattern unlike the cattle[20].

Table 1-5 Average yearly prices (Kshs) of livestock sold in Nairobi (1996-2000)

	Year				
Species	1996	1997	1998	1999	2000
Cattle	11,500	15,500	20,000	22,500	12,000
Goats	1,350	1,100	??	??	2,500
Sheep	900	900	2,150	2,500	1,000
Camels	11,000	14,000	16,000	20,000	17,000

Source: Nairobi Province Livestock Marketing Division Report (2001)

1.3.2 Mombassa

Three types of butcheries operate in Mombassa and the vicinity - retail butcheries serving the local population; big butcheries which stock between 200-2,000 head of cattle at a time serving the tourist hotels; and, butcheries with their own ranches who also supply the tourist hotels.

Small-scale Orma and Mucamba livestock traders from the nearby areas supply retail butcheries serving the local population whereas large-scale Somali traders supply the ranches and the big butcheries. The small-scale traders emphasise that trade was

[20] The authors suggest that these price records should be treated with caution.

somewhat good until the early 90s, when young steers mainly from the Northeastern province, Somalia and possibly from Ethiopia flooded the Mombasa and the Malindi markets (which are usually trekked). The increase in supplies created a glut in the local markets. Consequently, the Somalis introduced selling to large-scale butchers and ranch owners on credit[21]. This precedent set up the situation, which is now the norm in Mombassa and Malindi.

Unlike in Nairobi, retail butcheries in Mombasa and Malindi get their meat supplies directly from the small-scale livestock traders (Ormas, Mucambas etc.,) whose additional role includes slaughtering the animals and delivering the meat to local butcheries besides purchasing and transporting the cattle from primary/secondary markets. Traders agree in general that they make a gross margin of between 1,000 and 3,000 shillings/head. For example, a 350 Kg live weight bull may cost between 11and 13,000 shillings in Garsen. Taxes and transport may cost up to 1,000 shillings to Mombasa plus a slaughtering fee of 300 shillings/head. The carcass from such animal may be sold for 15-17,000 shillings to butcheries. The offal may fetch an additional 1,000 shillings. Both the meat and the offal are sold on credit and it may take livestock traders a week or two before they receive payments. Livestock traders complain about the tying up of their capital due to this system and strongly suggest that credit sales should be scrapped. On the other hand, livestock trades can keep their animals in Mombassa for as long as they require and as such are not under pressure to dispose their animals before dark. Four slaughterhouses serve small-scale livestock traders in Mombassa.

Ten privately owned big slaughterhouses in the vicinity of Mombassa cater for large-scale butcheries serving the tourist hotels and vessels that call on the port. Average daily consumption for Mombasa and the vicinity is estimated at 300 cattle, 400 shoats and 40,000 chickens[22]. However, figures from the provincial DVS meat inspection reports show a significantly lower consumption level, perhaps as a result of differences in classifying what constitutes the geographical spread of Mombassa. Yet still, Mombassa recorded more slaughters than Nairobi over the 1996-2000 period (420,132 against 319,035 animals)[23].

Table 1-6 Number of livestock slaughtered in Mombassa (1996-2000)

	Year					
Species	1996	1997	1998	1999	2000	*TOTAL*
Cattle	54,374	43,129	33,596	26,463	28,975	186,537
Goats	46,364	45,280	29,719	21,851	16,996	160,210
Sheep	19,738	18,170	13,234	9,682	8,646	69,470
Camels	1,404	1,058	603	495	355	3,915
TOTAL	121,880	107,637	77,152	58,491	54,972	420,132

Source: Mombassa PDVS Meat Inspection Reports (1996-2000)

[21] Interview with local livestock traders - Jele Osman, Said Golo, Mohamed Dame, Guracho Abawata and Boru Dela.

[22] Interview with Dr Fazil, a private Veterinary practitioner

[23] Note that these figures only give number of animals slaughtered in Nairobi slaughterhouses. A lot of meat also comes from other slaughterhouses outside Nairobi, e.g. in Machakos, Kiambu and Kajiado districts.

Mombassa also recorded a continuous decline in the number of animals slaughtered over the same period. Of particular significance is the decrease by 30,485 animals in 1998. This decrease followed the serious ethnic clashes of 1997 that rocked Likoni and adversely affected the tourism industry. Tourism is the major economic activity in Mombasa and it contributes significantly to household incomes and thus to people's ability to purchase meat. In any case, the numbers of animals slaughtered in 2000 amounted to less than half the volume in 1996 (unless the DVS has changed its reporting system). Similarly, prices in 2,000 show an increase of at least 50% for all species compared to 1996.

Table 1-7 Average yearly prices (Kshs) of livestock sold in Mombassa (1996-2000)

	Year				
Species	1996	1997	1998	1999	2000
Cattle	7,000	9,000	12,000	14,000	18,000
Goats	1,000	1,200	1,800	2,000	2,500
Sheep	700	1,000	1,200	1,600	2,000
Camels	10,000	13,000	15,000	20,000	25,000

Source: Mombassa Province Livestock Marketing Division Report (2001)

1.4 The Export Market

Past exports of live animals to the Middle East took place from late 70s to late 80s. These exports at the time were single-handedly carried out by an individual named Idrisi, who withdrew from the business for reasons unconnected with the trade. Idrisi now believes that the time for live animal exports is over and that the focus should be on chilled meat exports. Another export attempt by Andrew Wilson (in 93/94) was not successful either as a result of the high price of local meat. Since then Kenya has not exported any significant quantities of live animals save for occasional dairy stocks to neighbouring countries (Ethiopia and Uganda). The demise of the KMC also saw the end of canned meat exports and a significant reduction in the volume of chilled beef exports from Kenya. Between 1996 and 2000 Kenya exported less than 800 tons of chilled beef, goat meat and mutton combined (including liver, kidneys, tongues and offal).

There were no data on exports of live camels and camel meat, though there are indications that live camels may have been exported to Egypt on one or two occasions in the last 5 years. In fact, Kenya has been exporting more of pork products than beef, mutton and goat meat combined in the last few years. Farmers Choice (FC), the leading pork products processor and distributor in Kenya, exports about 1,500 tons/year (20% of its total production) to UAE (for expatriate communities). Closer to home, FC used to export pork to Uganda until a ban was imposed by the latter claiming that Kenya imported meat contaminated with BSE and re-exported it to neighbouring countries[24]. Although it is possible that pork contaminated by BSE infected beef could onwardly transmit the infection, to date, this route has not been isolated as a source of infection. FC's beef exports to tourist hotels and the mining industry in Tanzania was also halted following a ban on fresh meat, hides, skins and horns imports from Kenya on the grounds

[24] The East African, January 2002, pp 25

of Rinderpest outbreak in wild animals at the Meru National Park last August. With the RVF ban still in place, Kenya's export access is severely limited.

Table 1-8 Livestock and livestock products exported from Kenya (1996-2000)

Year	*Animal species*	*Product*	*Quantity*	*Value (Kshs)*
1996	Cattle	Live animals (No)	325	4,758,373
		Meat (Kg)	38,309	4,086,766
		Other (Kg)	1,100	196,384
	Goats	Live animals (No)	205	510,000
		Meat (Kg)	2,938	433,790
		Other (Kg)	430	96,525
	Sheep	Meat (Kg)	16,208	1,328,306
1997	Cattle	Live animals (No)	320	2,670,875
		Meat (Kg)	118,042	11,536,419
		Other	914	161,927
	Goats	Live animals (No)	530	615,000
		Meat (Kg)	894	98,920
		Other	567	30,768
	Sheep	Carcass	8,423	1,680,172
1998	Cattle	Live animals (No)	70	86,156
		Meat (Kg)	229,370	27,000,840
		Other	3,755	140,081
	Goats	Meat (Kg)	14	1,960
	Sheep	Live animals (No)	15	101,237
		Meat (Kg)	9,263	1,331,240
		Other	271	25,633
1999	Cattle	Live animals (No)	20	244,000
		Meat (kg)	297,597	39,845,656
		Other	2,076	895,541
	Goats	Live animals (No)	15	1,289,540
		Meat (Kg)	60	11,600
	Sheep	Meat (Kg)	16,817	2,114,519
2000	Cattle	Meat (Kg)	60,215	6,812,867
	Goats	Live animals (No)	450	481,005
		Meat (Kg)	1,946	668,376
		Other	846	157,268
	Sheep	Meat (Kg)	25,341	3,585,520

Source: Derived from Customs and Excise Department Export Statistics (1996-2000)
*Other = Livers, kidneys, tongues and offal

On the other hand, Kenya has imported 1,622 tons of mainly mutton and beef, twice the amount it exported for the same period, from Australia, New Zealand, the Netherlands and also Mauritius (Mauritius probably exports mutton imported from Australia). Information was not available on whether the imported beef and mutton in Kenya were destined for local markets or re-exports to the region.

Table 1-9 Volume, type and value of imports of live animals and meat products

Year	*Animal species*	*Product*	*Quantity*	*Value (Kshs)*	*Source countries (Main)*
1996	Cattle	Live animals (No)	5	187,505	• Australia • New Zealand
		Meat (Kg)	17	87,313	
	Goats	Live animals (No)	44	1,044,875	
	Sheep	Live animals (No)	2	169,238	
		Meat (Kg)	443,581	31,729,230	
1997	Cattle	Live animals (No)	524	2,505,318	• New Zealand • Netherlands
		Meat (Kg)	17,402	3,991,123	
	Sheep	Meat (Kg)	183,476	12,933,776	
1998	Cattle	Meat (Kg)	1,677	426,469	• New Zealand • Netherlands
	Goats	Live animals (No)	170	98,185	
	Sheep	Meat (Kg)	240,567	15,463,815	
1999	Cattle	Meat (Kg)	17,096	3,315,281	• New Zealand • Netherlands
	Goats	Live animals (No)	35	2,253,061	
	Sheep	Meat (Kg)	502,201	18,203,826	
2000	Cattle	Meat (Kg)	12,648	2,581,073	• New Zealand • Mauritius
	Sheep	Meat (Kg)	203,551	14,198,623	

Source: Derived from Customs and Excise Department Import Statistics (1996-2000)

1.5 Operational slaughterhouses, abattoirs/industrial abattoirs in Kenya

There were 65 operational slaughterhouses in Kenya in the year 2000. Sixty-three of these slaughterhouses dealt with red meat. The other two, namely, Farmer's Choice and Kenchic, slaughtered pigs and poultry respectively. Kiamaiko and Mlolongo dealt exclusively with shoats and camels respectively. Only two out of the 65 slaughterhouses, i.e., Hurlingham and Farmer's Choice, are export standard slaughterhouses; the rest serve the local meat market. The annual output capacity of Hurlingham and Farmer's Choice is 10,000 cattle and 20,000 pigs respectively. Both are privately owned.

Since the collapse of the Kenya Meat Commission in 1985, there has not been any other industrial abattoir in Kenya. Although plans have been made to revive it, the crippling debt of about US$ 20 million has discouraged many of the would-be investors from purchasing it. Elsewhere, plans are underway to start an abattoir in Laikipia (Leete, 2001) through the Laikipia Farmers Association and at Atti or Garissa through a private individual initiative. As it is Kenya, when compared with Sudan, Somalia or Ethiopia, has the least number of export standard abattoirs (for beef, mutton and goat meat) in the region.

Table 1-10Average size and annual capacity of operational slaughterhouses in Kenya (2000)

Ownership	*Number*	*Average annual capacity (No)*	*Range (No)*
Private	32	18,343.75	5,000-120,000
Public	31	9,774.19	4,000-120,000
TOTAL	63*	14,126.98	4,000-120,000

Source: compiled by the authors

*Includes only those slaughterhouses that deal with red meat.

1.5.1 Reasons for slaughterhouses operating below capacity

All the 63 red meat slaughterhouses in Kenya were operating below capacity in 2000. The main reasons for this include:

- Reduced local demand for meat as a result of low purchasing power of consumers. This has arisen from the country's poor economic performance, especially in the 1999/2000 period. The prices of meat have not responded to the depressed purchasing power. It has been observed that the demand for meat in Kenya is price inelastic (Kibunja, 1976). This was confirmed during the inflation of 1992/93 associated with the 1992 General Elections. Although the prices of most of the other goods went down thereafter, the prices of meat remained unchanged and have been high ever since.

- Lack of enough animals for slaughter especially during high meat demand seasons such as Christmas, New Year, Easter and Ramadan. This is a seasonal problem, which is mainly caused by adverse weather conditions and insecurity in livestock producing areas, particularly in pastoral areas. Another factor that has reduced animal supply to slaughterhouses is the sub-division of ranches (see the section below). Reduced local production has led to the influx of illegal imports of livestock into the country from neighbouring countries. For example, conservative estimates indicate that about 50,000 head of cattle enter Kenya from Somalia, 100,000 from Ethiopia and 250,000 from Tanzania every year (LMD, 2001).

- Reduced access to export markets for various reasons.

1.6 Ownership and Status of Ranches in Kenya (as at December 2000)

Kenya has a number of large ranches compared to Ethiopia or Sudan. The ranches were performing well in the 60s and 70s and were considered as potential sources of supply for quality cattle for both the domestic demand and the export markets. Given proper management and enabling environment, the ranches could still support the livestock industry of Kenya in a variety of ways – as disease free zones, quarantine centers, holding, fattening and conditioning grounds, for raising high quality studs and as strategic reserve in times of drought. However, many of the ranches have been performing below expectations for a variety of reasons.

According to the Range Management Division of the MoARD, there were 454 ranches in Kenya as at December 2000. Of these, 321 were Group ranches, 84 were Private Company ranches, 27 were District Agricultural Company ranches, 17 were Cooperative ranches, while 3 and 2 were Agricultural Development Corporation (ADC) and Public Company ranches respectively.

Table 1-11 Ownership and status of ranches in Kenya as at December 2000

Ownership	*Status*						*Total*
	Dormant	Operational	Proposed	Sub-divided	To be sub-divided	Undefined status	
Group	17	39	0	104	109	52	321
Private	28	33	1	0	0	22	84
DAC	23	3	0	0	0	1	27
Co-operative	6	9	1	0	0	1	17
ADC	1	0	0	2	0	0	3
Public Company	2	0	0	0	0	0	2
Total	77	84	2	106	109	76	454

Source: Derived from Range Management Division Annual Reports (1995, 2000)

From the above table, 215 out of 454 ranches in Kenya were either subdivided or destined for subdivision. Another 77 were dormant, while 76 did not have a clear indication as to whether they were operational or not. Only 84 out of 454 ranches were operational by 2000, comprising 46.4%, 39.3%, 10.7% and 3.6% group, private company, DAC and cooperative ranches respectively. Although group ranches comprise the majority of ranches in Kenya, 213 (66.4%) of them face the threat of subdivision, while 69 (63.9%) of the remainder are either dormant or have no defined operational status. The land area of twenty-one of the 454 ranches is not determined. The total land size for the remaining 433 ranches is estimated to be in the region of plus or minus 7.5 million hectares.

Table 1-12 Total Land Area Under Ranch

Ownership	*Number**	*Total area (ha)*
Group	307	4,848,696
Private	81	1,516,903
Cooperative	16	261,225
Public Company	2	41,202
ADC	3	908,354
Total	433	7,575,570

Source: compiled from Range Management Division Annual Reports (1995, 2000)

1.6.1 Viability of some of these ranches

A close examination of 10 major ranches[25] in Kenya reveals that, as at December 2000, only three were operational; the rest were either dormant or had been subdivided.

[25]On the basis of hectarage

Table 1-13 Status of 10 major ranches in Kenya as at December 2000

Ranch	*District*	*Size (ha)*	*Ownership*	*Status*
Galana	Malindi	877,064	ADC	Dormant
Eselenkei Emotor	Kajiado	194,565	Group	To be subdivided
Olgulului Lolara	Kajiado	147,060	Group	To be subdivided
Mbirikani	Kajiado	126,657	Group	To be subdivided
Siana	Narok	98,210	Group	Operational
Koyaki	Narok	87,675	Group	Operational
Kenya Triangle	Kwale	81,750	Private Co.	Dormant
Olkinyei	Narok	78,785	Group	Operational
Ewaso Kedong	Kajiado	71,304	Group	To be subdivided
Oldonyo Onyokie	Kajiado	68,566	Group	Subdivided

Source: Compiled from Range Management Division Annual Reports (1995, 2000)

Of particular note is the collapse of Galana ADC ranch. Measuring 877,064ha (6,000km^2) and with a capacity to accommodate 30,000 head of cattle at a time, the ranch is rated the largest in Africa. It was in Galana that the Kenya Trypanosomiasis Research Institute (KETRI) discovered the trypanotolerant Orma Boran cattle breed in the early 1980s. Administratively, the ranch falls in three coastal districts of Tana River, Malindi and Kilifi. The ranch started in 1967 as a limited company, Galana Game and Ranching Company, until it was acquisitioned in 1978 by the Government converting it into a parastatal ADC ranch. The new management inherited about 22,000 head of cattle, 200km of water pipeline and 2,000km of roads and trucks from Galana Game and Ranching Company (Bourn and Wilson, 1997). This number of cattle was maintained for the next two years, until a progressive destocking in 1991/92. By early October 1996, there were only 8,832 cattle remaining decreasing to less than 3,000 head by 1998. Mismanagement was the main cause of this decline. Other problems include reduced cash flow as a result of reduced cattle population, influx of illegal grazers, especially Orma pastoralists from Tana River district, and banditry. In 2001, the ranch was operating at a minimum level, with some 3,500 head of cattle.[26] The management is also trying to diversify income by leasing land for tourist lodges.

The next category of major ranches in Kenya is the group ranches. These were established in 1940s and 1960s and were mainly concentrated in the pastoral areas, particularly Masai land (Kajiado, Narok and Transmara districts). Group ranches are made of several families collectively holding title to the land but maintaining individual ownership of livestock. The objectives of starting group ranches were (a) to increase productivity of the rangelands by bringing them to commercial production, (b) to maintain production by keeping stocking rates within the limits determined by the carrying capacity of the land, (c) to conserve the natural resource in the rangelands by controlling their exploitation, (d) to provide pastoralists with adequate standard of living, and (e) to avoid landless adults at the time of demarcation since all members have equal shares regardless of wealth.

[26] Interview with Dr Maurice, Manager of Galana Ranch

The general performance of group ranches has been poor due to mismanagement, lack of strong incentives to institute proper range management practices such as de-stocking, improvement of pasture and water resources, lack of finances and subdivision. For instance, out of the eight major group ranches shown in Table 20, five are earmarked for subdivision. In some cases, subdivision is allowed for political expediency, regardless of the economic viability of the resultant unit. The future of this category of ranches is bleak if subdivision is not stopped.

Private ranches are production enterprises in which an individual member either leases land from the government or, with the consent of the community, registers communal land as private property. In other cases, the individual owns the land privately on a freehold tenure. Examples of these kind of ranches include Malinda and Machakos in Machakos district, Mackinon Road Dokata and Kenya Triangle in Kwale district. The major problems affecting the performance of individual ranches include mismanagement, lack of funds for operation and development, high interest rate, poor ranch infrastructure, disease incidence, Agricultural Finance Corporation (AFC) loan arrears and lack of adequate and stable markets for livestock.

Company ranches, on the other hand, are production enterprises in which land is leased from the government and prospective shareholders put up livestock or cash as shares in the company. These were established in the late 1940s by the colonial government mainly in Nakuru, Laikipia, Machakos and Kwale and Taita Taveta districts. They represent the most advanced form of ranch management and are usually the main sources of high quality beef. Profits are shared according to established arrangements. Management operates under a policy making board of directors. The future of this category of ranches is threatened by (a) lack of credit given the high interest on bank loans, (b) increasingly unserviceable AFC loans, (c) lack of market outlets for livestock now that KMC has collapsed and Kenya has lost its share of the export market, (d) unqualified and inexperienced ranch managers who often mismanage ranch resources, and (e) inadequate diversification programs. Most of these ranches, e.g. Lewa Down and Kisima in Laikipia district are now venturing into tourism and irrigated cropping as a way of diversifying their sources of income.

Cooperative ranches are made up of several individual shareholders and qualify as cooperatives as defined by the Cooperative Societies Act CAP 490. Profits are shared according to established arrangements. Members maintain individual livestock ownership in one portion of the ranch while the other is managed commercially. Most of these ranches are still operational although some of them are beset by a number of problems including (a) mismanagement, (b) lack of credit for water and infrastructure development, and working capital, (c) influx of illegal grazers and squatters, (d) lack of livestock market outlets, and (e) subdivision.
In summary, ranches in Kenya performed well in the 1960s and 1970s. But in the 1980s and 1990s, their performance declined so drastically that some have virtually wound up.

1.7 Hides and skins

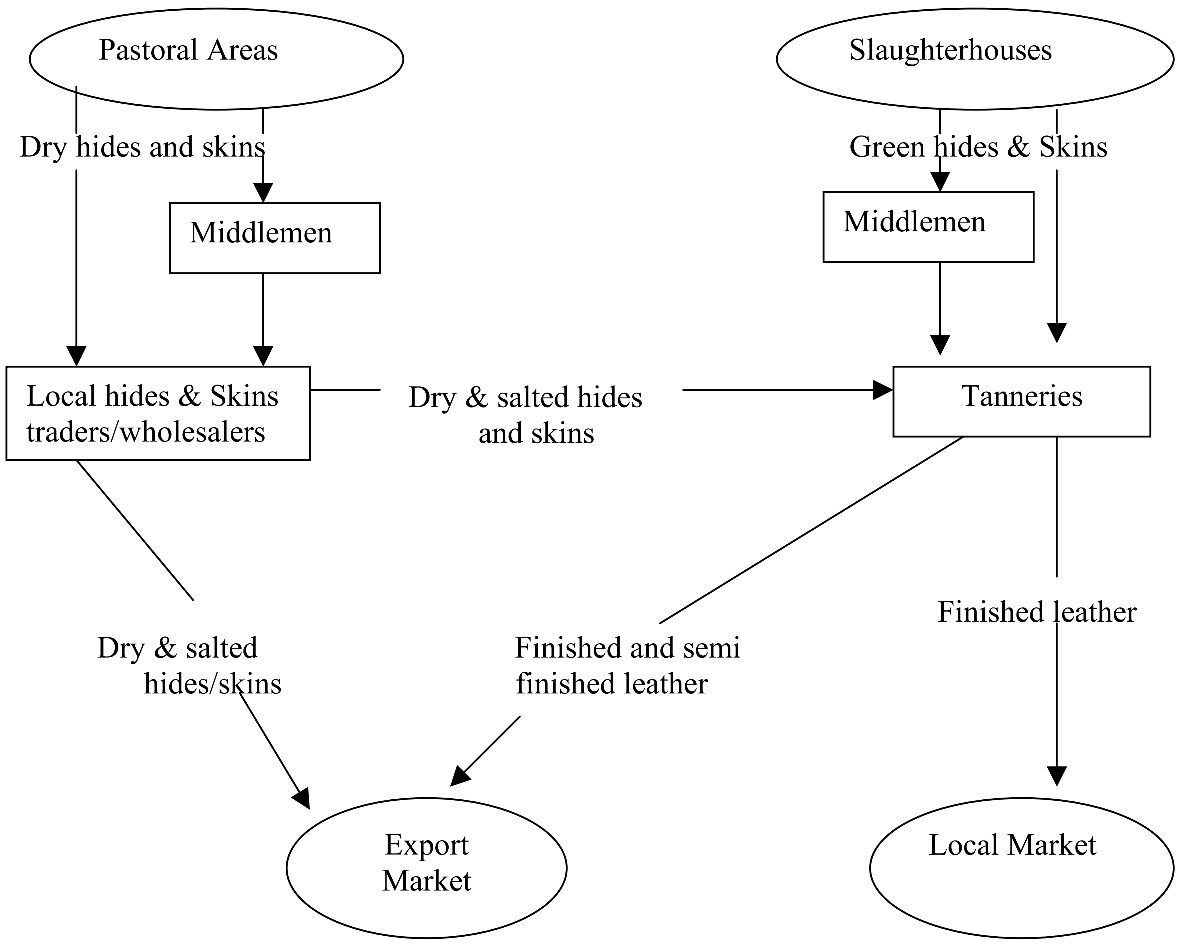
Hides and skins are generally obtained from two major sources. One is pastoral area, mainly North Eastern Province (for camel hides) and Masai land, while the other source is slaughterhouses in major towns. Middlemen collect hides and skins from the two sources and sell them in bulk to either local traders or tanneries. Hides/skins from pastoral areas are collected when they are already air-dried while those from slaughterhouses are collected wet green. On average, middlemen buy hides from pastoral areas at between Kshs 5-20 and skins at Kshs 10-20. This is a flat rate because grading is not done at the farm level. The middlemen sell to the local trader or tanneries at between Kshs 50-100 per kg of hide and Kshs 60-75 per skin. Transportation cost varies from Kshs 300 to 400 per ton of hides or skins. At this level, the middlemen make between Kshs 5-15 per kg of hide/skin on average.

Middlemen buy green hides/skins from slaughterhouses at a rate of Kshs 30-60 per kg and sell to local traders and/or tanneries at Kshs 100, 90, 80 and 50 for grades 1-IV respectively for hides and Kshs 75 per skin. The margin at this level is between Kshs 5-10 and Kshs 12 per kg of hides and skins respectively. Some middlemen treat the green hides/skins before they sell them. Two types of treatment commonly undertaken are (i) Air drying - usually done in structures called *bandas.* The *bandas* are privately owned and charge the hides and skins traders a fee of between Kshs 10 and 15 per hide/skin for using the facility. The price for air-dried hides/skins varies between Kshs 120-140 per kg. They fetch a margin of between Kshs 20-22.50 per kg. (ii) Salting. This is where fresh hides/skins are impregnated with Magadi soda. Up to 5kg of Magadi soda is used for each hide. The salted hides/skins are kept for about two weeks after which they are marketed at an average price of between Kshs 50-100 per kg, fetching a margin of between Kshs 5-10 per kg. Local traders also treat wet/green hides/skins in their warehouses at the Industrial Area before exporting or selling to local tanneries. Hides are usually exported when raw (dried) or wet salted. The main buyers are Pakistan, Italy, India and China. Selling price varies between Kshs 50 and 120 per kg of hide/skin with a margin of between Kshs 10 and 15 per kg.

At the tanneries, the raw hides/skins are tanned into pickled, wet blue and then into finished leather. Some of the products (mainly pickled and wet blue) are exported in a semi-processed form. Most of the finished leather is marketed locally to leather industries including the *Jua Kali* sector, which usually buys upper leather, sole leather and splits.

Generally, poor animal nutrition, branding, external parasites, thorns, improper flaying and storage and putrefaction affect the price of hides and skins in Kenya. Transport problems are not uncommon, as well. Most affected are skins and hides originating from pastoral areas. For example, pastoralists are required by Government to brand their animals to deter livestock raiding. The impact of this measure is questionable as there is no inspection of ownership of the herds.

The Market Chain for Hides and Skins



1.7.1 Exports of hides, skins and leather products

In year 2000, Kenya had only 11 operational tanneries, seven tanneries below the 18 operational in 1992. Many of these tanneries closed after 1990 when the 22% export compensation was abolished and the country opened its markets to international competition. The following table provides a list of the tanneries and their status in the year 2000.

Table 1-14 Operational tanneries in Kenya (2000)

Tannery	*Annual output capacity*		
	Hides	Skins	*Status*
Bata	200,000	10,000	Operational
Nakuru Tanners	15,000	1,200,000	"
Bulleys Tanners	840,000	1,800,000	"
Leather Industries	300,000	NA	"
Sagana	150,000	NA	"
Njoka	10,000	300,000	"
Aziz Din	10,000	25,000	"
Rwambuzi	NA	NA	"
Sammimpex	-	150,000	"
East African	15,000	140,000	"
New Market	NA	200,000	"
Nova Skins	NA	400,000	Closed
Babar Tannery	480,000	NA	"
Alpha Rama	250,000	1,000,000	"
Lake Tanners	150,000	500,000	"
Kamiti Tanneries	150,000	1,800,000	"
Kitale Tanneries	60,000	NA	"
Garissa	-	200,000	"

Source: Department of Veterinary Services

Available evidence indicates that many of the active tanneries are operating below capacity as the leather industry has continued to decline in spite of its growth potential. For instance, the leather and footwear industry quantum index decreased steadily from 83.5 in 1987 to 48.6 points in 1999. A number of factors are attributed to this state of affairs:

- Shortage of hides and skins to tan from increased exportation of rawhides and skins in recent years. It has been reported that local tanneries process only 15% of the hides and skins produced in the country, the rest 85% is mainly exported raw to Italy, China, India and Pakistan (DVS, 2000). Traditional tanneries also use a small proportion of this.
- Depressed demand for locally finished leather and leather goods because of cheap imports. This has arisen from (i) availability of cheap synthetic leather (ii), reduced capacity of the *Jua Kali* leather sub-sector, (iii) high production costs of manufactured goods (because of high taxes on raw materials such as chemicals, machinery and spare parts and expensive power, among other things. Other taxes include 2% Presumptive Income Tax on hides and skins and 18% VAT on locally finished leather goods).
- Stiff competition at the world market for locally produced leather and leather products. In addition, locally produced leather is wrongly perceived to be of low quality.

- Lack of export support. Following trade liberalisation in 1990, the 22% export compensation was scrapped, which made tanning for export unprofitable.
- Lack of credit/finance. Tanning is a capital-intensive venture and requires availability of inexpensive credit.

Table 1-15 Quantity of hides, skins, leather and leather products exports (1996- 2000)

	Quantity of exports in MT			
Year	*Raw Hides*	*Raw Skins*	*Semi-processed hides and skins*	*Leather products (Units)*
1996	60.3	26.6	62.1	622
1997	47.2	37.5	64.4	820
1998	94.1	40.4	73.9	690
1999	162.8	25.1	52.9	1178
2000	139.9	22.3	74.2	1350

Source: Compiled from Customs and Excise Department Export Statistics (1996-2000)

1.7.2 Trends in Hides, Skins and Leather exports (1996-2000)

Compared to Sudan and Ethiopia, Kenya exports smaller quantity of hides, skins, leather and leather products on annual basis. Yet, between 1996 and 2000, Kenya's' volume of exports has doubled for raw hides and leather products. A marginal growth rate was also recorded for semi-processed hides and skins with slight decline in the volume of raw skins exported in the period.

However, the increase in the export volume of hides has not been matched by a corresponding growth in value. This is because Kenya has been exporting more of raw hides, which attract lower world market prices than semi-processed or finished leather. In the period under review, the value of skins exported has remained more or less proportional to volume. The overall value generated from leather products in 2000 was much less than that of 1996 in proportional terms. This depends much on the quality and types of leather garments / articles exported and the prevailing market price at the time of export.

Table 1-16 Value of exports of hides, skins and their products (1996-2000)

	Value of exports (Millions Kshs)			
Year	*Hides*	*Skins*	*Leather*	*Leather products*
1996	5.9	3.1	7.5	0.11
1997	2.0	3.7	6.6	0.11
1998	3.3	2.7	7.6	0.06
1999	6.6	1.6	4.8	0.10
2000	8.7	2.7	6.0	0.15

Source: compiled from Customs and Excise Department Export Statistics (1996-2000)

1.8 Polices and Institutional issues

Relevant Acts

A number of Government Acts impact livestock marketing in one-way or another. These include: the Animal Diseases Act; the Hides and Skins Act; the Stock and Produce Theft Act; the Stock Traders Licensing Act; the Pig Industry Act; the Dairy Industry Act; the Co-operatives Act; Hatchery Rules, the Kenya Meat Commission (in receivership) Act, etc. Two of these are summarized below.

- *Kenya Stock Traders Licensing Act of 1962, revised 1983*

  The Stock Traders Licensing Act, CAP 498 implies that 'No persons shall carry on the trade or business of a stock trader without a license, whether as a principal, partner or agent.' The exceptions are farmers who buy, sell or barter stock in the course of their business as farmers and residents in special areas set apart for the use of the tribe to which they belong. The Act empowers Provincial and District Commissioners to issue stock traders licenses for a year or half a year and the police, administrative, veterinary officers or inspectors to inspect the license on demand. Contraventions of this act may result in a fine of 2,000 shillings or imprisonment for a term not exceeding 6 months or both'.

- *The Animal Diseases Act, CAP 364, 1972 (revised 1989)*

  This act provides the veterinary director with 'the power to declare areas infected, provisions affecting infected areas (isolation, disinfections and movement of animals), power to prohibit importation of animals (incorporating Rules L.N.106/1965), slaughter and disposal of carcass of infected animals, indemnity and payment of compensation (incorporating Rules L.N. 106/1965), power to search for infected animals, power to prescribe fees for drugs and vaccines, power to prohibit use of vaccine or drugs along with the power to search and detain suspects and the disposal of forfeited animals'. The Act also incorporates the Subsidiary Legislation of The Animal Disease Rules related to: Importation of Animals; Movement of Animals; Infected Areas; Further provisions to prevent spread of disease; and, Miscellaneous Provisions. Animal Disease rules for Birds, FMD, Compulsory Rinderpest vaccination, control of Pig diseases are also incorporated. A Subsidiary Legislation also includes the requirement of a license for importation through Mombassa or Lamu ports or through Kisumu, Nairobi and Mombasa airports only. The legislation also stipulates on the examination of imported animals, certificates required for imported animals, tests to be carried out, quarantine procedures and the requirements of other certificates if necessary. However, the Rule makes exceptions to Tanzania and Uganda from where animals may be imported 'subject to such restrictions and requirements as the Director may from time to time direct.' The Act doesn't specify provisions for live animal or animal products exports.

The issuance of 'movement permits' is the most widely practiced aspect of this Act without which livestock are not permitted to travel from high-risk areas to the terminal markets. The application of other aspects of the Act is subject to the available means. As things are now, funds, equipment and materials and trained personnel are in short supply. Disease Free Zones that were maintained in central parts of the country and from which livestock and livestock products were exported in the past no longer retain that status. The eight quarantine facilities[27], run jointly by the DVS and the LMD are not providing the same level of service as in the past. In view of market liberalization and the changes that has taken place since then (for good or worse), some sectors feel that the laws governing livestock diseases are outdated and need to be reviewed. For example, the Act doesn't cover cross-border livestock imports. Livestock originating from such sources are in reality treated in the same manner as those from high-risk areas within. Exports of livestock and livestock products, when it happens, takes place through established veterinary procedures (which are not included in the Act) and the requirements of the importing country. The provision governing the inspection of livestock for 100 days (for three CBPP tests) prior to exports could be unrealistic in today's highly competitive world market. **The question is why keep the rule on paper when reality dictates otherwise?**

These days there is a growing keenness amongst interested parties (civic associations, government agencies, donors, NGOs, regional organization etc) to promote livestock marketing in quality and quantity to alleviate the predicaments of the primary producer and also the livestock trader. However, following the exit of LMD and KMC from the market, no specific policy has been formulated to date aimed at supporting and facilitating the livestock trade *per se.* Livestock marketing whether for the domestic or the export markets has been left to the rules of globalisation. In the process, Kenya has ended up in importing twice the volume of red meat and offal it has exported between 1996-2000.

Government policy on livestock marketing (or the lack of it) comes from policy changes imposed through structural adjustment programs and to a little extent through its own initiatives. A shift in Government policy in mid 1980s focused on agriculture in providing food security, the absorption of the labour force, boosting export earnings and rural industrialization.[28] Specific policies included liberalization of markets and removal of government subsidies on investments and services effectively sidelining the LMD (of the MoARD) from operating in the markets.

<u>The LMD and KMC</u>

LMD and KMC's exit from the market has affected the status and ownership of the infrastructure developed in ASAL areas. These include 112 holding grounds, 34 stock routes, 34 water pans, 46 boreholes and 4 storage tanks. The LMD has maintained a few of these facilities some of which were handed over to Users Association and Management Boards under a memorandum of understanding to guarantee some sort of sustainability. However, the fact that many of the facilities are no longer used by LMD has led to 'repossession by local authorities, allotment to private developers and

[27] Kacheliba, Marigat, Marmar, Isiolo (with Kina), Bangale, Kurawa and Wenje.
[28] Sessional Paper No. 1 of 1986, Economic Management for Renewed Growth

vandalism.' Moreover, 'insufficient budgetary allocation for maintenance, confusion over title deeds, political interference, insecurity, lack of clear sustainability policies and the closure of KMC'[29] has made the future of the facilities uncertain. Insecurity has become a major concern following the closure of some of the markets in ASAL areas. The refurbishment of the Isiolo holding ground complex, for example, has led to a futile rivalry between the Borans and the Somalis tribes over the question of ownership[30]. South of the Sanitary Corridor, some of the land was de-located to other uses such as schools and for growing crops (though the LMD still retains some land).

In its operational days, the LMD functioned under different hats – as a supplier of immatures to the Agricultural Finance Corporation (AFC) which then on-lent the animals in kind to ranch owners; or directly to its own ranches or the KMC (after one CBPP test); or as a 'buyer of last resort', in times of drought, in which case, what ever was salvaged by LMD had to be slaughtered by the KMC. In a way, both the KMC and the LMD doubled as service providers, roles that included drought management, provision of facilities and disease control. Yet both agencies were allocated budget from the Government's 'Trading Account' rather than from the 'Contingency Account.'[31] LMD incurred heavy losses in the 78 and 79 drought and was forced to exit from the market around 1982. KMC followed suit in 1987 for widely known reasons - failing to maintain the high export standards, mismanagement and heavy processing losses among others. Despite its rehabilitation in 1995 with a capacity of a daily throughput of 750 head of cattle (or 1,000 head on a double shift) it has not been operational for various reasons. Despite the liberalization of the markets, the private sector has not been able to replace either the LMD or the KMC.

1.9 Planned and On-going programmes

1.9.1 The LMD

Following the Structural Adjustment Programme, the subsequent role of the LMD was revised to[32]:

- Supervision and maintenance of about 8 strategic quarantine holding grounds;
- Commercialisation of strategic outspans and night stops;
- Establishment of livestock information network;
- Carrying out limited livestock offloading activities during times of distress together with other stakeholders for ruminants and cattle in ASAL areas while 'the marketing of other livestock species have been left with the private sector and the NGOs with occasional intervention through Government micro-projects.'

At the national level, the LMD collects info on livestock prices through the District Officers on monthly and quarterly basis. However, the information arrives late at the

[29] Marketing of Livestock and Livestock Products in the ASAL areas, LMD (unpublished)
[30] Interview with Mr Marete, LMD
[31] Ibid. Mr Marete added that 'It is difficult to do business when you are told what to do.'
[32] Marketing of Livestock and Livestock Products in the ASAL areas, LMD (unpublished)

Head office rendering it unusable for making decisions based on current market information (though it may be used for assessing past trends). There is also a need to improve the accuracy and quality of the information.

Accordingly, the LMD suggests that a concerted effort is required by all stakeholders to work on three critical areas to improve the livestock marketing system in the future. These are:

- Developing market information system at the national level;
- Operationalization of the quarantine corridor, and
- Conflict management.

In addition, the LMD has prepared a 6 year $27 million Livestock Development Program Proposal covering 30 districts in ASAL areas which has been submitted to the African Development Bank. Programme components include:

- Promotion of sustainable livestock production in ASAL areas
- Support to community-based livestock development and drought mitigation initiatives
- Strengthening of the animal health delivery services, livestock and livestock products marketing and quality control and regulatory services;
- Promotion of processing and value adding of livestock products;
- Enhancing the capacities of both the public and private sector service providers[33]

The project is designed to operate through existing Government structures focusing on 'community priorities to ensure sustainability through cost-sharing and commercialization.' In addition, the project is aimed at promoting the private sector, by developing close operational linkage with livestock traders, pastoralists, butchers, private sector service providers, credit institutions, transporters etc. The project aims to increase the off-take rate for cattle from 12 to 16% in pastoral areas and from 8 to 10% in the agro pastoral system, increase Cold Dressed Weights for beef stock from 130 to 150 kg, decrease mortality rate in beef cattle from 5 to less than 3% and increase overall beef production by over 3% by the end of the project. The Off-take rate for small stock is anticipated to increase from 14 to 28% with increases in Cold Dressed Weight from 15 to 20 Kg in goats and from 20 to 25 Kg in mutton sheep. Other perceived benefits of the project include decreased calf mortality in camels, promotion of bee keeping, quality assurance and quality control of 'safe utilization of animal food origin' and establishing maximum residue levels along with improving the quality of hides and skins through appropriate interventions. The proposal is currently under negotiation.

1.9.2 Arid Lands Resource Management Project (ALRMP)

As a key player in pastoral areas, the IDF funded project (with a $3.4 million budget for the livestock marketing component) has made a contribution in areas of improving livestock marketing infrastructure (sale yards, water points and access roads) and

[33] Development Proposal for the Arid and Semi Arid Lands, LMD (unpublished)

establishing market information system. Its key achievement includes the promotion of community-based initiatives, which included establishing pastoral and livestock marketing associations at the grass-root and the district level culminating into the registration of the Kenya Livestock Marketing Council.

1.9.3 Kenya Livestock Marketing Council

The Council regards itself as a private entity. ALRMP has played a critical role in the formation of the KLMC. ALRMP also provided office to the KLMC until a long-term arrangement was made recently with the MOA to provide a base for the latter.

The Council is run by a board and an executive committee. The structure of the Council begins at community levels reporting to the District Councils. The Districts report to the National Council. Membership is open to all livestock traders upon payment of 500 shillings annual membership fees. Though there are only 500 members at the moment, the Council is striving hard to recruit more, as this will provide the financial basis on which the Council will sustain itself. Income from subscription fees is divided equally between the district and the national Council. So far, 10 district Councils have been formed in predominantly pastoral areas.

The Council emphasizes that the demise of the KMC and LMD has seriously undermined the potential livestock off-take from pastoral areas. It also underlines that this has led to deteriorating market infrastructures, lack of market information, insecurity and banditry, disease outbreaks and quarantine restrictions, inadequate credit and insurance facilities, distance to terminal markets, lack of organized market outlets and stockholding facilities and lack of export quality abattoirs near the sources of livestock.

The council makes a point that the prevailing terms of trade at terminal markets disadvantage small livestock traders and the producers. The facilities in Dagoretti and Kariobangi terminal markets in Nairobi are such that traders are forced to sell all their stocks on the day of arrival regardless of the prevailing price of the day. Any trader coming to the terminal markets, therefore, operates on a wild guess whether he would make a profit or a loss from the stocks to be sold. This arrangement has led to the proliferation of a powerful cartel group consisting of middlemen and butchery owners who have the final say in the market. Small livestock traders in Mombassa are particularly inconvenienced as they have to i) bear the costs of slaughtering and skinning the animals and ii) sell on cold dressed weight basis to butcheries on credit minus the offal and the skin. It is not uncommon for small traders to wait for a month or more before they get paid.

The Council, as a result, has set itself a number of ambitious objectives to redress the situation. These include:

- Advocacy for the rights of traders;
- Promoting livestock and livestock products marketing from pastoral areas;
- Identifying market gaps locally, regionally and internationally;
- Enhancing the dissemination of market information to both producers and traders;

- Liaison with pastoralists at grass root level; Support the exportation of live animals to alleviate poverty;
- Support to entrepreneurs investing in slaughterhouses, cold storages, and other premises for improved livestock marketing;
- Undertake extension services in liaison with the government;
- Fund solicitation for credit facilities and offering group guarantees;
- Revitalize traditional drought coping mechanisms including appropriate modern technologies along with a role in conflict resolution for better management and utilization of resources.

In addition, the Council, subject to the availability of funds and technical know how, has contingency plans to rehabilitate the dilapidated infrastructures along the stock routes previously owned by the KMC and LDP. These include watering points, sale yards, the management of holding grounds through users associations, crushes etc. There is also a plan to lease the holding grounds of Kibiko and Athi River and develop these sites into holding grounds and terminal sale yards with all the necessary facilities including security in a bid to alleviate the current predicaments livestock traders face at Kariobangi and Dagoretti. If and when these objectives are met, the Council intends to provide the services of these facilities to its members at a fee both for the upkeep and maintenance of the facilities and for generating additional revenue for the Council. Given time, capital and a consensus among its members, the Council would also like to set up its own butchery outlets in the major terminal markets to curb the power of the cartel and to pass the additional margins to livestock traders and producers eventually. The KLMC reckons that managing the sale yards and having own butcheries will in the longer-term help them to regulate the flow of livestock to the terminal markets in a coordinated manner and thus achieve market stability.

The KLMC is a nascent organization and the tasks it has set itself are enormous. Whether they can achieve even a reasonable proportion of the objectives and contingency plans depends on how the organization evolves in the coming years. At this stage, the KLMC needs to make distinction between its immediate, short-term and long-term objectives. The immediate objectives should focus on consolidating the Council, recruiting more members, lobbying with donors, NGOs and Government, advocacy, capacity building and so on. The dissemination of market information, training, trade missions, the rehabilitation of infrastructures, support to livestock exporters, etc., depending on the institutional evolvement, should be set as medium and long-term objectives.

1.9.4 Southern Rangelands (Rural Services Design Project) - This was a World Bank funded pilot project on livestock marketing information for Kajiado and Narok districts. The outcome of the project was less than the expectations.

1.9.5 GTZ - GTZ is involved in the collection of livestock price information in Moyale, Isiolo, Marsabit and Nairobi with the objective of disseminating the info in local languages to pastoralists and traders (apparently, GTZ is funding a similar undertaking on the other side of the border).

1.9.6 NGOs - A number of NGOs with particular interest in livestock marketing include OXFAM (UK), SNV, Action Aid, World Concern and CIFA.

1.9.7 GL-CRSP/PARIMA of ILRI – runs a USAID funded project focusing on pastoral risk management systems (including livestock trade as a risk factor), the harmonization of cross-border issues and experience sharing and technology transfer on economic diversification among women groups along the Ethiopian and Kenyan border.

II Ethiopia

2.1 Livestock Resources and Off-take

FAO (FAO, 1999) estimates the livestock population of Ethiopia at 35 million cattle, 39 million shoats and 1 million camels. Sandford (Sandford *et al, 1999),* on the other hand, estimates the camel population at 2.4 million and the livestock population in pastoral areas at 9,291,181 head of cattle (or 30% of the total), 12,424,204 sheep (or 51.7% of the total) and 8,061,072 goats (45% of the total) and 100% of the camel population[34]. FAO estimates a 1.1% growth rate for cattle and –0.2% for small ruminants against a backdrop of 2.5% human population growth per annum. In other words, the livestock population growth has been lagging behind the human population.

Off-take rate is estimated at about 8% (FAO 1998) for cattle, one of the lowest in Africa in terms of proportion to the livestock population. This amounts to between 2.2 and 2.8 million head of cattle/year. Off-take for sheep and goats is estimated at 40.5% and 34% respectively or a total of about 14.5 million shoats annually. Nevertheless, there is a possibility that the FAO estimate may not include the off-take that takes place through the cross-border trade to Somalia, Djibouti and Kenya. Various estimates (Gebresellasie *et al* 1998, Ministry of Foreign Trade, 1987) put the volume of the cross-border trade to these three countries at about 260,000 head of cattle, 1.2 million shoats and (Dirbaba, 2001) 16,000 camels. Thus the off-take level of livestock particularly for shoats and to some extent cattle could be relatively higher than both estimates.

According to FAO, domestic meat production has been increasing annually at a rate of about 2% for beef and 0.7% for mutton while goat meat and camel meat production has remained static in the last five years.[35] Within these, beef accounted for 65% of the total red meat production, mutton around 19% and goat meat 13%. Camel meat accounted for 2.5% of the annual red meat production.[36] The FAO consumption figures remain the same for the years 2000 and 2001 for some inexplicable reasons.

Table 2-1 Type and Volume of Meat Produced (in MT)

	1997	*1998*	*1999*	*2000*	*2001*
Beef	270,000	274,000	290,000	298,000	298,000
Mutton	80,800	81,000	81,400	83,000	83,000
Goat meat	63,100	63,200	63,400	63,500	63,500
Camel meat	10,656	10,680	10,704	10,812	10,812
Total	424,556	428,880	445,504	455,312	455,312

Source: FAOSTAT

[34] The MOA, after readjusting the figure by subtracting the livestock population in Eritrea, estimates that pastoral areas, covering some 60% of the total landmass, account for 73% of the goats, 25% of the sheep, 20% of the cattle and the entire camel population.
[35] FAO's figures differ from the Ministry of Economic Development Cooperation (MEDAC). The latter projects annual production growth of 1.8% for goat meat and 2.2% for camel. FAO's annual production figure for camel meat is nearly five times the estimate of MEDAC.
[36] Cattle and in most cases – shoats are slaughtered in Ethiopia in the backyards. Data on meat production should therefore be treated with caution.

2.2 The Domestic Livestock Markets

Livestock markets in Ethiopia function at three levels consisting of primary, secondary; and terminal markets[37]. Some (Solomon *et al,* 2000) also include a nominal forth tier at the farm gate level, which could hardly be considered to function as a market. Primary markets have been identified as village level markets with a supply of less than 500 head of cattle/week where primary producers (farmers and pastoralists) sell small number of animals to small traders, other farmers (replacement animals), farmer or pastoralist-traders and in some cases to consumers and local butchers. Such markets are not fenced, have no scales, and no feeds and watering facilities. Purchasing is done through 'eye ball' negotiations. A good majority of the livestock markets in Ethiopia belong to this group.

Secondary markets are trader and to some extent butcher dominated markets, with an average volume of 500 – 1,000 head per week consisting of finished, breeding and draught stocks and located mainly in regional capitals. Secondary markets serve the local consumers to some extent but mainly feed the terminal markets. These markets also supply live animal exporters and meat processors.

The terminal markets are located in large urban centers consisting of Addis Ababa, Dire Dawa, Dessie, Nazreth and the coffee growing regions of Sidama and Gideo. Medium to large-scale traders and butchers dominate these markets. Average volume of cattle brought to these markets may exceed over 1,000 head/week.

Supply of livestock to the primary and secondary markets including to the terminal markets is mostly done through trekking. Traders/producers use traditional stock routes to trek their animals to the markets. **In Ethiopia, there is no requirement for livestock movement permits as in Kenya** (though this is being discussed in the parliament now) and producers or traders are free to take their livestock wherever they want to. Cattle are walked about 35-40 kms and shoats 15-25 kms/ a day on average. Staging points are chosen on customary practice but may change depending on the season and security. A 1995 study[38] showed that a 100 km trekking costs Birr 1.15 per cattle and Birr 0.16 per shoat. Though trekking could be inexpensive relative to trucking, whether the costs saved from trucking would outweigh the weight loss incurred through trekking at the eventual point of sale would be an interesting point to look at. For example, an average weight loss of 8.9% (18-40 kg/head/trip) was reported over a 7-8 days trek from the highlands of Gasera (Bale) to Dera (Arsi) of cattle weighing between 200 and 450 Kgs according to a study conducted by Arsi Rural Development Project over a period of 12 months. The loss could be higher for animals originating from lowland areas.

Distance, security, the condition of the animals and timing determine the decision to trek or truck. Trucking is usually limited to medium and large-scale traders who purchase from distant primary and secondary markets to supply the terminal markets and the meat processing plants in bulk, large scale butchery owners who buy from the secondary markets and to some extent feed lot operators buying from primary or secondary markets.

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[37] Orangewoud International in association with RDP Livestock Services, 1995
[38] Ibid

In some cases, the latter have been reported to trek animals ranging from 2 to 15 days to the feedlot centers depending on the point of purchase[39].

The decision to sell animals by the primary producers (both farmers and pastoralists) is usually based on urgent cash requirements. Producers come to the markets with no information beforehand on the going price of the day and farmers may take back their animal(s) if the price offered is too low to try their luck next time in the same or in another market nearby. Pastoralists take the same measure if the market happens to be close to where they graze their animals. But, if the market is of some considerable distance from where they reside (such as the Bati market attracting pastoralists from as far as a four day round trip distance), then they will be persuaded to sell their animals, however low the price is on the day, as they can't afford to return empty handed without buying grain and other necessities for their families. Profit becomes a motive for sale only at farmer-trader level and above.

Borana is the main supplier of livestock to the terminal markets of Sidama and Gedeo, a coffee growing region, where per capita meat consumption is high. Numerous primary markets that converge into secondary markets within a radius of some 300 Kms from the capital supply the Addis terminal markets. Animals from such distant places as Borana, Wolaita and Harar are also brought direct to Addis. Most butchery owners also buy livestock from private feedlot centers around Nazareth and Modjo and from small-scale fatteners elsewhere and transport the animals directly to the abattoir bypassing the terminal markets in Addis. As a result, the numbers of animals sold in the terminal markets of Addis are far below the total amount consumed in the city at any given time.

The last fifteen years have seen the proliferation of private feedlots around Nazareth, Mojo and Debrezeit towns in close proximity to the terminal markets in Addis. In 1995, there were about 51 of them with capacities to fatten between 100-250 head at a time. The feedlots buy cattle from primary and secondary markets and feed them on concentrates consisting of wheat bran, oil seed cake, molasses, salt and essential minerals. Finished animals are sold direct to butchery owners and traders. In addition, several households in these towns are also engaged in small-scale fattening activities, consisting of 1-3 head of cattle. Small-scale fattening is also a common practice among the highland farmers of Hararghe and Wolayta, where 1-2 head of cattle are tethered and hand fed. While the small-scale fattening activities are still going on, the initial success of the commercial feedlots has been severely affected by increasing costs/ unavailability of concentrate feeds. In addition the butcheries offer low price for fattened animal on the grounds of lower shelf life of the meat, relatively lower dressing weight and consumers' preferences for pasture-fed cattle. As a result, many of the commercial feedlots that were set to dominate the terminal markets at one time have been closed.

2.2.1 The Addis Terminal Market

Addis Ababa has six livestock market centers that are managed and owned by the City Administration Agricultural Bureau.

[39] Ibid

Kéra is the largest of these markets for cattle and is served by the Kéra abattoir nearby. Kara Alo and Akaki (a suburb) also deal mainly with cattle. Most of the shoats slaughtered in Addis are bought outside of the designated markets. All purchases are done through negotiations. The specifics of these markets are provided in the following table.

Table 2-2 Terminal Market Centers in Addis

Market	*Area in m^2*	*Animals sold*	*Market fees and sales tax*	*Major suppliers*
Kéra	20,500	Cattle	10 Br/head	Eastern, S.Eastern and southern parts of the country. Consisting of traders (65%) and stocker feeders (35%)
Kara Alo	800	Cattle	10 Br/head	Northern and western parts of the country. Major suppliers traders and to some extent stocker feeders
Semen Gebeya	8,000	Mainly cattle but also shoats	10 Br head for cattle and 1 Br /shoat	Western part of the country
Akaki	8,000	Mainly cattle but also shoats	4 Br/head for cattle and 1Br/shoat	Local producers and stocker feeders. This market is considered as a secondary market to Addis. Major buyers are traders
Birchiko	Unknown	Shoats	1 Br/shoat	Western parts of the country. Major transaction between wholesalers and retailers
Aware	Unknown	Shoats	Possibly 1 Br/shoat	Not yet known as it was constructed recently

It is difficult to find accurate data on the number of livestock slaughtered in Addis as available data suggest that only one-third to one-half of the cattle slaughtered at the Kéra abattoir are supplied through the terminal markets of Addis. Furthermore, according to some estimates[40], an almost equal number of cattle are slaughtered outside of the designated abattoirs, which are not recorded. In addition, bound by traditional norms and lack of effective legislation, most Addis Ababans slaughter sheep in their backyards (this is also true for chickens). The number of sheep slaughtered in the abattoirs is almost negligible despite mutton being as equally, if not more, preferred as beef in Addis. What emerge from the available data is that the market share of the terminal markets for cattle is declining and that the designated sheep markets (Aware, Birchiko and Semen Gebeya) are almost rendered non-functional as sheep are sold and bought in any corner of the city.

Available data for the period 1996/97 – 99/00[41] indicate that some 35-60,000 head of cattle are sold annually through the terminal markets of Addis. According to the same

[40] Estimates of officials of City Agricultural Administration Bureau and Quarantine and Meat Inspection section.
[41] From City Administration Bureau of Agriculture

source, 65% of the cattle supplied to Addis terminal markets constitute fattened steers while the balance is composed of bullocks / oxen and to a limited extent barren cows. A 1999/2001 data indicates that Bale has been the major supplier of fattened steers to these terminal markets (about 38%) followed by Hararghe (29%), Borana (8.4%), Arsi (6.2%) and Wolayta (3.8%). For bullocks/oxen, Arsi was the highest supplier (28%) followed by North Shewa (20%), Hararghe (19%), West Shewa (9.6%) and then Bale (6%). Estimates based on the quantities of skins collected in Addis indicate that some 600,000 sheep and 90,000 goats are slaughtered on annual basis. Cattle and sheep supplies to Addis come predominantly from the highland areas. The above data signifies that pastoral areas are squeezed out of the local markets with the relative exception of Borana in the south. Notwithstanding the factors of proximity and the availability of exchange goods, this scenario explains why pastoral areas rely more on the cross-border trade than on internal markets. This dominant position of the highland areas is likely to continue in the foreseeable future with the current level of the national off-take. Similarly, the cross-border trade is likely to expand and grow with all its implications if the current off-take level is not augmented through the export market or increased national per capita consumption rate.

Table 2-3, Proportion of cattle sold through terminal markets Vs the total Slaughtered at Kera

	No.of cattle sold in Addis terminal markets[1]	*No. of cattle inspected at Kéra abattoir*[2]	*% Supplied through the terminal markets*
96/97	54,592	125,595	43%
97/98	55,589	131,996	42%
98/99	38,037	168,180	23%
99/00	44,650	155,459	29%

Source: 1 Addis Ababa City Administration Bureau of Agriculture
2 Addis Ababa Abattoir Enterprise

Middlemen are prominent particularly at Kéra and Semen Gebeya and in some of the undesignated sheep markets. Middlemen have no license or do not pay tax and operate as syndicates. On arrival, traders are persuaded to tell brokers the price they look for and hand over the cattle to them. If brokers think that the price a trader is asking for is too high, then they pressure the trader to bring his price down and thereby maximize their margins. Brokers also add their own margin on top of the trader's price when negotiating with buyers. Anything above what the trader has asked for goes to the broker in addition to an average commission rate of about Br 250/head. Brokers justify their existence through sheer intimidation and in the process play a critical role in determining the price of the day.

There are three abattoirs in Addis of which two are public owned - Kéra and Akaki. These are managed by the Addis Ababa Abattoir Enterprise. Akaki slaughterhouse is located in the outskirts of the city and serves both Akaki town and Addis. Kara Alo, a share company, serves the Eastern peripheral areas of Addis and supplies meat to some 35 butcheries. Usually, cattle of lower quality are slaughtered in Kara Alo.

Kéra is the oldest and the biggest of all with an average daily intake of some 500 head of cattle (up to 2,000 head/day during holidays). Kéra also slaughters about 150 shoats a day mainly for some hotels and restaurants. This low figure signifies that most of the small ruminants are slaughtered at home. The Kéra abattoir is busy on Wednesdays and Fridays as demand for meat peaks up on Thursdays and Saturdays. The abattoir also provides transport services for meat and offal to the butcheries.

Transaction costs, market and abattoir service fees are applied at flat rate regardless of the value of the cattle purchased in all the terminal markets (though transport costs are less for Kara Alo). The City agricultural and Finance Bureaux and the abattoirs collect these fees. The service fees and transaction costs add up to Br 87/head at Kara Alo and Br 104 at Akaki and Kéra markets. At Kéra, there is also an additional brokerage fee of about Br 250 on average, bringing the total paid for service and transaction fees to Br 354/head. Based on a three year cattle price data (1998-2001) collected by the City Bureau of Agriculture, the proportion of transaction costs and service fees at Kéra market (including broker fees) is equivalent to an astounding 17% of the purchase price of a steer, 29% of a Bullock/oxen and 27% of a barren cow.

Table 2-4 Costs incurred for Market Transaction and Service fees per cattle in Addis In Birr

Particulars	*Collected by*	*Kara –Alo*	*Akaki*	*Kéra*
Market service charge	Agriculture Bureau	5.00	5.00	5.00
Sales Tax	Finance Bureau	5.00	5.00	5.00
Meat inspection	Agriculture Bureau	2.00	2.00	2.00
Slaughtering and transport	Abattoirs	40.00	57.00	57.00
Income Tax	Finance Bureau	35.00	35.00	35,00
Brokerage fee	Brokers	-	-	250.00
Total		87.00	104.00	354.00

Source: Compiled from data provided by the City Agricultural Bureau

2.2.2 Butcheries

An estimated 1,085 butcheries operate in Addis, of which 835 are licensed. All butcheries serve traditional cuts to customers. Some of these butcheries also double as 'beef restaurants' serving raw and fried meat to customers. Such services may cost additional 2-5 Br/kg of meat. Almost all butcheries operate as 'meat kiosks' with no cold chain facilities on the pretext of customers' preference for fresh meat (with the exceptions of few groceries where European cuts are served).

According to Data from the City Agricultural Bureau, the proportion of animals bought in the terminal markets compared to the numbers offered is declining. For example, 68% of the steers and 57% of the bullocks/oxen offered for sale were bought in 1998/99. In 2000/01, only 58% of the steers and 33% of the bullocks/oxen were purchased. The decline may be attributed to a growing trend of butchery owners sourcing animals outside Addis to cut costs on brokerage and market service fees that offset the additional transport costs incurred. At the same time, marginal decreases in live weight prices have been observed over the last three years - from Br 6.10/Kg for steers in 98/99 to Br 5.72 in

2000/01; from Br 4.2 to Br 3.98 for oxen/bullocks; and from Br 5.23 to Br 5.17 for cows. With increasing trends of butcheries sourcing animals outside Addis, the number of cattle sold through the terminal markets may even decrease further. This should serve as a signal for the city administration (i) to review the service fees and transaction costs to an equitable level of the services provided, and (ii) to minimize or stop unnecessary brokerage fees paid by butchers at Kéra to attract potential buyers. Already, the city administration is loosing so much money from sheep sold outside of its designated markets.

In spite of declining livestock prices, the price of beef has remained constant in Addis within the existing range over the last few years. Variations in meat prices in Addis mainly reflect the location of the butchery, the quality of meat on offer and also the reputation of the particular butchery through word of mouth. Butcheries that double as 'beef restaurants' selling both raw and fried meat charge higher for both the take away and meat consumed in the premises. Such butcheries operate on large capital base with a high turn over rate and source their animals directly from secondary markets and feedlots. Similarly, there are also restaurants that are licensed to run 'meat kiosks' on the side serving both take away and dining customers. Such places may charge even higher than all the other butcheries.

Current meat prices in Addis range from Br 8/Kg in Kara, where low quality cattle are slaughtered, to Br 25/kg in Bole area for prime cuts. In some places like Kazanchis, the range varies between Br 14 and 16, and in Piazza, between Br 20 and 22. In Mercato, the price is usually around Br 13/kg. A survey by the City Agricultural Bureau in six zones of Addis puts the average price at Br 14.58/Kg. However, the survey didn't take into account the quality of meat served in the different butcheries. A more recent survey[42] suggests an average meat price of Br 18 and Br 16/Kg from fattened steer and fattened oxen respectively.

2.2.3 Producer's share of the Retail price

Trends indicate that the share of the producer from the retail price is declining. A 1983/84 Livestock Sub Sector Review[43] put the share of the producer at 76% of the retail price, the balance 24% being retained by the butcher. A 1995 study[44] indicated that the producer's share has gone down to 55% of the retail price in Addis Ababa. It was 56% in Nazareth and 72% in Chancho (a small town north of Addis). There are no indications, in both cases, if the retailers' overheads were included in the calculation. Nevertheless, the figures provided a general picture.

The following table is based on data collected by the City Agricultural Bureau for three years on live weight, price and the associated service fees and transaction costs at the Kéra terminal market. Other overheads such as license fees, taxes, utilities, labour and income from offal and skins are not included in the calculation.

[42] Taken by Alemayehu Reda
[43] Livestock Sub Sector Review,Vol 3, Annex 3, 1984
[44] Orangewoud International, July 1995

Table 2-5 Estimated Gross profit of butcheries per cattle (in Birr)

Particulars	*Fattened steer*	*Fattened oxen*
Average purchase price in Addis	2,096.00	1323.00
Service fees, taxes and transaction costs	354.00	354.00
Total cost	2,450.00	1,586.00
Average live weight in Kgs	346	296
Dressing percentage	50%	50%
Carcass weight in Kgs	173	148
Average selling price of meat/Kg	18	16
Gross income	3,114.00	2,368
Gross margin	664.00	782.00

Source: Compiled from City Agriculture Bureau data

It should be noted that the purchase price of cattle in Addis includes a mark up of one-fourth to one-third over that of the producer's price. Moreover, butchery owners accrue significant savings from brokerage fees and lower purchase prices (that offset additional transport costs) when they source livestock from outside of Addis. Traders operating in this manner could easily realize a gross profit margin of over Br 1,000/head. However, the increase in the profit margin is not transferred to the producer. In fact, the price of live animals has gone down considerably in recent days due to decreasing purchasing power of the population. The local daily, Addis Zemen, reported[45] that cattle sold as much as Br 2,500 are now offered for as low as Br 1,500 (March 2001). Yet, the Daily cited complaints from customers that the price of beef has remained the same, demonstrating the power of the meat cartel.

2.3 Exports

The share of animal and animal products from total export earnings has been declining steadily over the last five years from 12.4% in 95/96 to 8.4% in 98/99. This was not because exports in other types of commodities have increased. It was rather due to the underperformance of the livestock sector for a variety or reasons.

Table 2-6 Share of Livestock and Livestock Products on Foreign Exchange Earnings

	Of the total export				*Of animal and animal products*		
Years	Animals & animal products	Hides and skins	Meat	Live animals	Hides & skins	Meat	Live animals
1995/96	12.38	11.88	0.47	0.03	95.9	3.77	0.23
1996/97	10.47	9.57	0.62	0.29	91.3	5.93	2.74
1997/98	9.36	8.40	0.71	0.25	89.7	7.56	2.72
1998/99	8.43	6.68	0.87	0.16	86.7	11.28	2.04
1999/00	8.43	7.24	0.83	0.36	85.9	9.81	4.24

Source: Adapted from National Bank of Ethiopia data

[45] Addis Zemen, February 3, 2001

Compared to its livestock resources, the volume of Ethiopia's livestock and red meat exports has been low for a long time. In addition to the usual constraints (livestock disease, poor infrastructure, inefficiency etc), the export potential has been severely hampered by inconsistent and at times self-defeating government policies over the past 30 years. The promising initiatives made in live animal, canned and chilled meet exports in the late 60s and early 70s through the private sector were prematurely curtailed following the nationalization process that took place in the mid 70s during the socialist phase. It took the substitute government agency, Livestock and Meat Development Enterprise (LMDE), some 7-8 years to initiate the export of live animals and chilled meat to the Gulf state and canned meat to Europe/Asia. The critical time lost until the LMDE established itself as an exporting agency saw the emergence of new suppliers to the Gulf States such as Australia, New Zealand and some European countries with which the LMDE couldn't compete. At the best of times, LMDE was capable of exporting about half a million shoats per year to the Gulf States. The canned meat export to Europe and Asia during this period was erratic in nature because of high overhead costs and supply problems.

To sum it up, the nationalization of the livestock export trade impacted the livestock-sector in a number of ways. Firstly, in a significant drop in the volume of live animals export to the Middle east and canned/chilled meat to other destinations. This provided a critical lead-time for other suppliers such as Australia and New Zealand in the Middle East market against which it is nearly impossible to compete today. Secondly, in the proliferation of the cross-border trade in unprecedented manner that continues to this day with all its implications (such as losses in tax revenues and the smuggling of goods on the reverse side). Thirdly, in significantly affecting the outputs of pastoral development projects (SORDU, NERDU and JIRDU) that were designed in mind with the private sector playing a lead role in the marketing of livestock - a crucial fact missed by so many consultants including the World Bank that financed and has since reviewed the outputs of these projects.

Nevertheless, prior to its sale the LMDE (like the LMD in Kenya before the mid-80s) was making a progress at its own pace by setting up purchasing offices in pastoral areas for both the export market and its own meat canning facilities. Following the change of Government in early 90s, LMDE's activities came to an end when its five meat processing facilities and holding grounds along with other facilities were sold to a single buyer. Since the privatization, the meat canning facilities have relied mainly on a captive domestic market of supplying canned meat and other canned products to the defense sector, albeit intermittently, depending on the available government budget. So far, the processing plants have not exported any quantity of canned/chilled meat. Whether they can export canned meat profitably, if and when they export, is doubtful given their current overheads, such as the use of imported tins for packing.

The impact of privatization is perhaps felt more on live animals exports following the demise of the LMDE. The nascent private sector (excluding ELFORA) lacks the huge financial capital required for live animal exports. Ethiopia's' export output has, therefore, been limited to chilled/mutton/beef in the last 5-7 years. This comes mainly from small private slaughterhouses established not long ago. Many of these small slaughterhouses are located within a radius of some 100 kms from the capital for close proximity to the airport. Though the volume of exports remains small in relation to the livestock potential of the country, a steady growth was maintained until the Gulf States applied the RVF ban in the year 2000. The ban has critically affected almost all of these small private exporters both in terms of limiting their output capacity and stalling their plans for expansion.

Table 2-7 Value and Quantity of chilled mutton/meat meat exported during 96/97-00/01

Year	*Quantity in MT*	*Value in '000 Br*
1996/97	1,716	24,175
1997/98	1,910	29,340
1998/99	2,078	31,644
1999/00	1,977	32,708
2000/01	NA	8,204 (3 quarters)

Source: National Bank of Ethiopia[46]

Trends of increasing volume of exports since 1994/5 have been reversed since 99/00 as a result of the RVF ban. This is particularly true for the year 00/01 as evidenced by the revenue earned for the first three quarters of the year 00/01.

Live animal exports in the last five years were minimal following the demise of the LMDE. This is attributed to a series of factors - shortage of capital, poor infrastructure lack of enabling policy and legislation, and the landlocked status of the country being the main hurdles in addition to the poor financing of veterinary services. ELFORA, the company that bought LMDE's facilities and operating on a substantial capital base, has not managed to export live despite their potential. As a result, Ethiopia's' live animal exports remain significantly low. Thus, only a total of 69,189 head (inclusive of cattle, shoats and camels) were exported in 96/97, 66,808 head in 97/98, 11,832 head in 98/99, 65,443 head in 99/00 and 3,509 head in 00/01[47]

2.3.1 Output potential Vs actual performance

The liberalization process in Ethiopia has nevertheless encouraged the establishment of private businesses in addition to the privatization of public owned enterprises. In the livestock sector, these include tanneries, leather manufacturing enterprises, meat processing plants, export standard slaughterhouses and poultry farms among other things. Ideally, this should have resulted in a corresponding growth in exports. But that is not the case.

[46] These figures are comparatively less than the one provided by the MOA's Health Certificate Unit.
[47] These figures were compiled from the MOA's Health Certificate Unit and differ slightly from Customs records.

Table 2-8 Output capacity of meat processing plants and export standard abattoirs

Company name	*As of year*	*Live animals*		*Chilled meat, mutton (MT)*	*Canned meat*
		Shoats	Cattle		
HELIMEX	1995	-	-	6,480	-
Dr T.Hailu	1996	20,000	-	500	-
ELFORA	1997	470,000	30,000	16,160	or 68.4 million tins
SAAFI	1998	54,000	-	400	
ALFOZ	2000	-	-	720	
	Total (as of '00)	544,000	30,000	24,260	68,400,000

Source: Ethiopian Export Promotion Agency. Please note that the list may not be exhaustive.

In the table below, a comparison is made between the theoretical capacity of the meat industry and the volume of exports from Ethiopia. The figures relate to the capacity of the private sector since 95/96. The data may lack some accuracy because of a gap between the time in which the individual facilities claim to be established and when they actually started operation. Furthermore, ELFORA has been focusing largely on the domestic canned meat market for the armed forces in the first two years of its operation during this period and this is not included in the table as the focus of this exercise is on the export market.

Table 2-9 Output capacity Vs volume of exports

As of year	*Live animals (head)*			*Chilled meat (MT)*			*Canned meat*		
	Capacity	Actual	Perform.	Capacity	Actual	Perform.	Capacity	Actual	Perform.
95/96	20,000	11,554	57%	6,980	949	13%	-	-	-
96/97	490,000	69,189	14%	23,540	1,716	7%	68.4 mil. tins	NA	NA
97/98	490,000	66,808	13.6%	23,540	1,910	8%	"	NA	NA
98/99	544,000	11,832	2%	23,540	2,078	9%	"	NA	NA
99/00	544,000	65,480	12%	24,240	1,977	8%	"	NA	NA

Compiled from Ethiopian Export Promotion Agency, National Bank of Ethiopia and MOA data

The factors that have led to this poor performance include (but not limited to):

- Lack of capital;
- High operational costs due to long inland transportation to the ports, high freight rates and high port charges;
- Lack of well maintained quarantine, holding grounds and stock route facilities;
- Government bureaucracy with LC procedures, clearing houses, transport arrangements etc;
- Shortage of cold storages, lack of standard materials such as packaging;
- High internal service charges, fees and taxes;
- Lack of information on export markets;
- Shortage of trained manpower etc.

2.4 Ownership and Status of Ranches in Ethiopia

Ranching is not that common in Ethiopia due to the land tenure policy that prohibited private ownership of land for the last 30 years. Even in these days of so-called liberalized markets, the Government policy states that land can be leased but not owned. As a result, the ranches that exist in Ethiopia are either leased or owned by cooperatives. Total leased private ranches, holding areas and feedlots add up to 58,060 hectares, a big proportion of which is owned by ELFORA. Cooperative ranches own about 51,000 hectares[48]. Most of these ranches are underutilized.

In addition, regional governments (Bureau of Agriculture) own some 15,000 hectares. In the past, many of these government owned ranches, when they were under the Ministry of Agriculture, were used for producing crossbred heifers and bulls. Even then the total number of heifers and bulls produced over the years was far less than the potential capacity of the ranches. The current status of these ranches is even worse due to shortage of budget, deterioration of grazing land (bush encroachment), lack of qualified personnel, shortage of inputs, reallocation of land for other uses, illegal grazing/charcoal production by farmers and more importantly lack of clear purpose. Furthermore, a significant proportion of the land area of some of the ranches (about 7,000 hectares) has been reallocated for other uses. The ranches are grossly underutilized at the moment.

2.5 Skins and Hides

Ethiopia has been exporting more of hides and skins relative to its meat and live animals export. The channels for the collection of hides and skins to the tanneries are relatively well established but need significant improvements to reduce damages caused by thorns, ectoparasitic diseases, poor flaying and storage methods. Whereas achieving significant improvements on the former two may not be easy given the country's under developed animal health delivery system and livestock grazing habits, technical improvements on the latter two are within reach given some commitment.

There has been a marked growth in the establishment of new private tanneries in Ethiopia since 1992, though many of them don't operate at full capacity due to shortages in raw skins and hides supplies. Most of the skins and hides exported are semi-processed (as pickled, wet blue or crest). Finished leather goods and articles are produced mainly for the domestic market and to some extent for the export markets. Hides and skins generate the second foreign exchange earnings after coffee. The export performance for the three quarters of the year 2000/2001 show a significant growth in the export trade over the previous years (see value for the three quarters of 00/01).

Table 2-10 Volume and Value of Skins and Hides Export for the Years 96/97 –00/01

Year	*1996/97*	*1997/98*	*1998/99*	*1999/00*	*2000/01*
Quantity in tons	8,637	7,892	8,824	8,604	NA
Value in '000 Br	372,253	347,699	243,052	286,459	480,758 (3 Quarters)

Source: National Bank of Ethiopia

[48] LMA, Brief Baseline Information on Ethiopian Livestock Resource Base and Trade, 2001.

There are some 19 tanneries in Ethiopia, 4 of which are public and 15 private. Ten of the tanneries were built since 1992 and two just recently. An additional 2 tanneries are under construction. Of the tanneries which are fully operational, 17 require some 18.4 million raw skins and 1.8 million hides for 275 working days/year at 85% capacity. Together with the two under construction, the 19 tanneries would require some 25.5 million skins and 2 million hides if they operate at 85% efficiency for 275 working days/year. When the two under construction are completed, the demand for raw skins and hides is going to be higher. On the other hand, informed estimates put the country's annual production of raw skins and hides at 16.2 and 2.4 million respectively[49]. Assuming that the estimated off-take rate is close to the true picture and given the fact that not all the raw skins and hides produced in the country are likely to reach the tanneries, it is likely that the tanneries will face a critical supply shortage of hides and particularly raw skins in the future.

The tanneries total daily output (including those under construction) is estimated at 9,955 pieces of hides and 133,450 skins per day. Current performance rate of the 17 tanneries that are fully operational varies between 50 – 83% for hides and 33-85% for skins.

Table 2-11 Daily Output Capacity Vs Actual Production of Selected Tanneries

	Hides (in pcs)			*Skins (in pcs)*		
Tannery	Capacity	Production	Performance	Capacity	Production	Performance
Mojo	-	-	-	9,250	5,000	54%
A.Ababa	5,000	4,000	80%	-	-	-
D.Berhan	-	-	-	6,000	2,000	33%
ELICO	650	540	83%	18,650	13,406	72%
Hora	-	-	-	4,500	2,250	50%
Dire	500	425	85%	6,000	5,185	85%
Bale	300	150	50%	2,000	NA	NA

Source: Ethiopian Export Promotion Agency

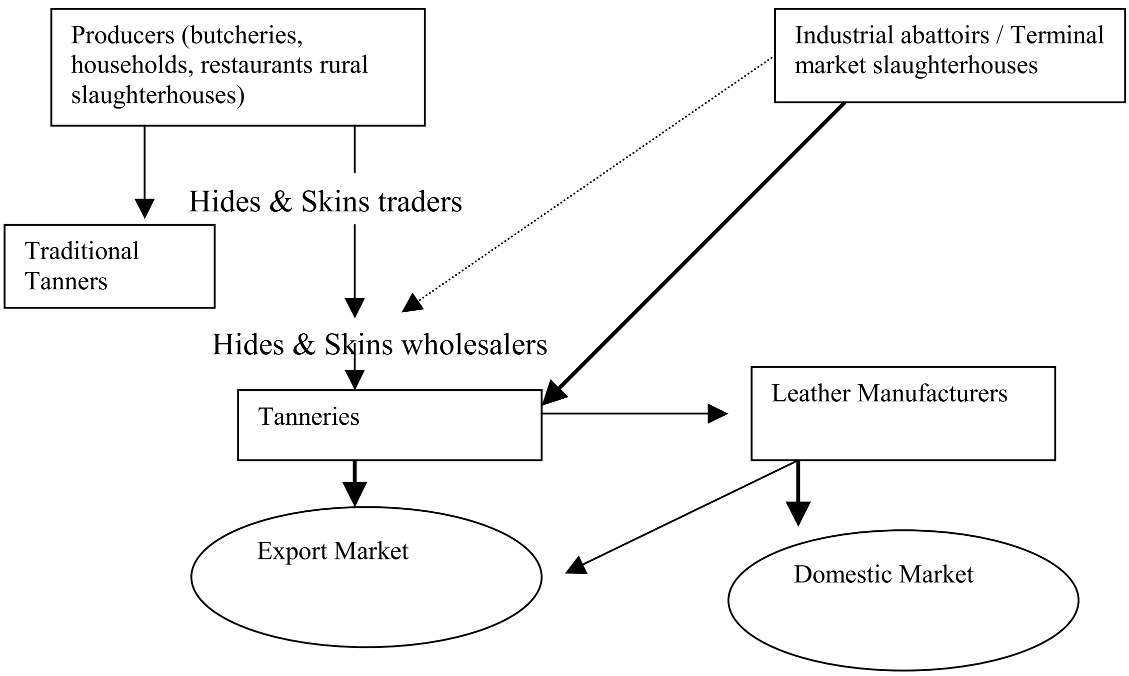
While existing tanneries are operating below capacity, the proliferation of new ones will further reduce the output per tannery to the extent where some may cease operation altogether (49 hides and skins processing investment projects were submitted to the Ethiopian Investment Agency between 1992-1999). Put simply, the current national production of hides and particularly skins is not sufficient enough for the existing tanneries let alone for new ones.

Most of the fully operational 17 tanneries produce semi-processed skins and hides. Only 6 of them (3 public and 3 private ones) produce finished leather – such as linings, leather garments, upper covers for shoes etc. Within these, only Awash Tannery produces the finished leather into leather articles and products. The other five supply the finished leather to domestic and foreign leather products manufacturing enterprises. The performance rate for these tanneries range from as low as 10 to 92%.

[49] This is based on the annual off-take rate

Between 1992 and 1999 alone, the Investment Promotion Authority awarded certificates to 106 leather industries. Of these, 14 had plans to export but only 3 are involved in the export business. The main product lines of these industries are shoes, but also other leather goods and articles, which are exported in small quantities to other African countries and Europe. The industry is trying hard to enter the highly competitive export market the success of which will depend on the price, quality and design of products and a tailored marketing strategy for each specific importing region/country. Similarly, the industry needs to safe guard its domestic market, as mass produced cheap imports could easily tip them out of business. Recently, the shoe manufacturing industry was in critical situation as a result of cheap imports of shoes from Turkey and China prompting the Ethiopian Tanners Association to lobby the government. Fortunately, the general public has come to know about the inferior quality of imported leather shoes from China and Turkey. Obviously, such public perception may help the survival of the industry more than a reluctant government intervention.

The Marketing Channel for Hides and Skins



2.6 The Cost of Livestock Trading in Ethiopia[50]

A study by LMA (Mekonen and Yimam*, 2001*) indicates a wide variation in the amounts of service charges, fees and taxes incurred by livestock traders depending on the source of supplies. These variations emanate mainly from the different levels of service charges and fees applied by the various Regional States and also from a convenient misunderstanding of the Federal Acts to enrich the State's coffer. Surprisingly, variations

[50] This section draws heavily from a recent LMA Report (Mekonen and Yimam, 2001).

in service fees and charges are also observed within a given Regional State between different market centers. For example, of the 19 market centers surveyed by LMA in the Oromia Regional State:

- *5 centers charge market service fees only from the buyer;*
- *13 centers charge service fees from the seller (whether he has sold any animals or not) and from the buyer for animals purchased;*
- *1center charges service fees from the buyer and the seller either individually or jointly.*

Basically, charges and fees at the local level include market service fees, transit fees and sales tax. Traders are subjected to pay all of these while producers/sellers may be charged to pay market service fees only depending on the center.

2.6.1 Market Service Fees

Local councils charge market service fees for providing space where buyers and sellers meet to conduct their transactions. Most of these market centers do not provide other facilities (such as watering and feeding troughs) except a fenced/walled area. In some cases, they may not be fenced at all. Yet, wide variations are observed in the service fees charged by different regions.

Table 2-12 Variations in Market Service Fees charged by the Regional States

Region	*Cattle*	*Shoats*	*Camel*
	Range in Birr	Range in Birr	Range in Birr
Somali	3.00 – 10.00	1.00 – 2.00	3.00 – 10.00
Oromia	1.00 – 20.00	0.40 – 5.00	4.00 – 10.00
Afar	3.00 – 5.00	1.00	-
SNNP	2.00-10.00	1.00-3.00	-
Amhara	1.00-2.00	0.50-1.00	2.00-3.00

Source: LMA

2.6.2 Transit Fees

There is inconsistency in the definition of the term transit fee. In some cases, transit fees are paid when animals enter the market. This could be translated as 'market entrance fee', the cost of which is borne by the producer/seller. Transit fees are also charged from the trader for animals purchased in the same market and trucked or trekked to other destinations, as a sort of export tax. This arrangement enables local councils to collect transit fees twice. Traders are also charged transit fees a number of times [51] en route to their final destinations, despite a regulation stating that transit fees are to be paid only at the point of origin from which the animals are to be exported. Local councils en route claim to charge transit fees on the pretext of maintaining the cleanliness of the towns but the fees are applied indiscriminately on both trekked and trucked animals. Moreover, the state of many of such towns is hardly convincing that the transit fees are used for the intended purpose.

[51] Interview with Mr A. Wosenyeleh, Marketing Manager, ELFORA

Of the five Regional States listed below, transit fees are exempted in the Afar region only, since there are no well-developed livestock markets in the region. Afars rely on the neighboring states of Amhara and Oromia to sell their cattle where they are liable to pay transit fees. The Somali Regional State also does not charge transit fees on cattle perhaps because of the low volume of trade in this species. The following table illustrates the range of applicable transit fees in each region. However, the total amount paid is subject to the number of regions and the specific towns that apply transit fees the livestock pass through[52].

Table 2-13 Range of Transit Fees Charged by Regional States

Region	Per head of cattle	Per Shoat
	Range in Birr	Range in Birr
Somali	-	2.00-3.00
Oromia	1.00-7.00	0.75-1.00
Afar	-	-
SNNP	2.00-10.00	1.00-2.00
Amhara	1.50	0.50-1.00

Source: LMA

2.6.3 Sales Tax

The Sales and Excise Act of 68/85 is confusing in nature. The Act stipulates that a 5% sales tax should be levied on the seller/producer and if this cannot be achieved for some reasons the tax should be collected from the buyer or the retailer (butcheries). This has led to a standard practice of collecting sales tax mainly from the traders and butchery owners for animals they have purchased. In some cases, sellers/producers are forced to pay sales tax for animals they have brought to the market but not sold[53].

The same Act also exempts exporters from paying the sales tax if the animals bought are to be exported either live or in the form of beef/mutton. Yet, exporters are persuaded to pay the sales tax either at the point of purchase or checkpoints, on the pretext of reimbursing them when they produce documentary evidences. However, exporters are discouraged from lodging return claims as the process of getting reimbursements takes up to a year[54].

Transaction is done in almost all markets through negotiations involving no receipts for animals sold or purchased. This loophole has led to a system by which the tax collector determines the proportion in sales tax a trader has to pay by making his/her own price estimate of the animals purchased. Needless to say, this system is open for corruption.
The sales tax varies according to the Regional States. For example, traders pay between 40-50 Br/cattle and 4-5 Br/shoat in the Somali Regional State. The Oromia Region

[52] In the Oromia region alone, transit fees are charged at Alemaya, Metehara, Nazreth. Kibremengist, Yabelo and Debrezeit. The fees range from Br 1 to Br 7/cattle and from Br 0.75 to Br 1/shoat.
[53] Mekonnen et al, A study report on the associated costs of live animals, meat, hides and skins export trade (Amharic version), LMA, 2001, Addis Ababa
[54] Ibid

Finance Bureau bases its sales tax at an average price rate of Br 450/cattle and camel and Br 60/shoat. This translates into a sales tax of Br 23/cattle and camel and Br 3/shoat irrespective of the actual purchase price. Yet, the Borana Zone of the Oromia Region charges only Br 10/cattle and Br 2/shoat. At the same time traders are forced to pay transit fees for passing through such towns as 'Bordede, Boreda, Negele, Kibremengist and Bore within the Oromia region'. Sales tax is charged in the Afar Region at three checkpoints for livestock originating either from within the region or from outside. The Region doesn't take into account whether traders have already paid sales tax at the point of purchase or somewhere else. According to the LMA study, the amount to be paid is determined through negotiations between the tax collector and the trader and if they fail to reach an agreement, the tax collector has the final say. Accordingly, the region charges the highest sales tax ranging between Br 50 and 75/cattle and between Br 6.50 and 15/shoat. The SNNP Region charges sales tax at its Tikur- waha checkpoint (at the rate of Br 2/cattle and Br 1/shoat) and at Karat (at the rate of Br 10/cattle and Br 2/shoat), whether traders have paid sales tax elsewhere or not.

In some cases, both sellers (for animals brought to the market but not sold) and buyers (for animals purchased) are subjected to pay sales tax, for example, in Hula and Sodo markets of the SNNP region. Yet, these two markets are prime examples of the inconsistencies surrounding the application of sales tax. In Hula traders are charged a sales tax of between Br 45-65/head whereas it is only Br 2/head at Sodo. Similarly Hula collects a sales tax of Br 5-12.50/sheep and Br 4-10/goat whereas, Sodo charges a minimal Br1/shoat. To add to the confusion, the study states that the Amhara region doesn't charge sales tax at all, except once in a year.

Table 2-14 Average Level of Sales Tax Levied by the Regional States

	Average Sales Tax in Br		
Region	Cattle	Sheep	Goats
Afar	62.50	10.75	12.00
SNNP	45.00	10.85	11.65
Oromia	16.50	2.50	2.50
Somali	45.00	4.00	4.00
Amhara	-	-	-

Source: LMA

A summary of the costs incurred by traders from points of purchase to exit points for the export market show significant variations. The table below indicates the fees and taxes paid en-route to Debrezeit abattoirs (for chilled beef/mutton exports) from supply sources of various locations. The data indicates that the highest cost per species is paid for livestock originating from the Somali region.

Table 2-15 Total Fees and Taxes incurred en-route to Debrezeit slaughterhouses (in Br)

To Debrezeit from	*Cost per head (cattle)*	*Cost per sheep*	*Cost per goat*
Dolo Odo	57.25	34.37	35.12
Mega – Yabelo	59.25	16.88	17.60
Jinka	15.00	6.00	6.00
Jijiga – Metehara	121.50	20.13	21.33
Asaita – Mile – Awash	70.50	14.63	15.88

Source: LMA

A similar study on costs incurred for live animals exports indicates that higher costs are incurred the further the point of purchase is from Galafi such as Eastern and Southern Ethiopia.

Table 2-16 Total fees and taxes for live animal exports through Galafi (in Br)

To Galafi from	*Cost per head*	*Cost per sheep*	*Cost per goat*
Hartisheik – Awash	124.50	26.75	40
Dolo Odo – Nazreth – Awash	64.50	11.25	12.50
Bati – Mille	65.50	11.75	13.00
Asaita – Logia	3.00	1.00	1.00
Mega – Yabello – Awash	126.75	28.51	29.48
Jinka – Galafi	82.50	17.63	18.88

Source: LMA

A summary of the costs, inclusive of all the taxes and fees borne by the exporter for exporting live animals, meat, hides and skins have been computed by LMA. Please note that the unit costs are averaged and actual costs may vary depending on the distance where the livestock/skins and hides were purchased from terminal points.

Table 2-17 Summary of service charges, fees and taxes for exporting live animals, meat skins and hides

Commodity	*Unit*	*Total Fees and Taxes/unit*
Live shoats	1 Sheep/goat	Br 28.10
Live cattle	Head	Br 100.94
Skins and hides	1 container (or 2,750 dozen)	Br 9837.90
Mutton/goat meat	Ton	Br 2,931
Beef	Ton	Br 884

Source: LMA

The two most important issues exporters complain about are government bureaucracy and the amount of money they have to pay, which does not equate with the services provided. In particular, exporters single out the Ministries of Agriculture, Foreign Affairs and Health as being unnecessarily bureaucratic where lack of commitment, absenteeism and preoccupations with workshops and meetings delay the provision of services on time. Part of the problem arises from each Ministry assigning only one individual to sign the documents. The absence of one signature means that the necessary document would be incomplete. Exporters also add that 'putting stamps and signatures on documents should not be that expensive[55].'

In addition, government offices don't provide services after 5:30 PM and on weekends during which time their services would be unavailable. As a result, there are instances in which exporters have been forced to take back chilled meat/mutton back to their cold stores particularly when the following days were weekends (In Kenya, the process for exporting perishable products takes few hours).

Cargo space on passenger flights is used for exporting meat either using Ethiopian Airlines or one of those airlines with scheduled flights to the country. Normal cargo rates are expensive and exporters prefer to utilize special freight rates. Chartered flights are uncommon and could also be expensive. Booking is required 3-4 days in advance for direct flights and 5 days ahead for connection flights. Cargo space limitations dictate the quantity to be exported at any given time. Meat exporters bring their cargo to the airport on the day of the flight due to shortage of cold storage facilities at the airport.

2.7 Policies and Institutional Issues

Following the structural adjustment program a slow market liberalization process has been taking place in Ethiopia. Formerly Government-owned industrial abattoirs and tanneries (except three of the latter) have been fully privatized. The Government owned Livestock and Meat Development Enterprise has been dissolved. Livestock and livestock products marketing are carried out entirely by the private sector.

One private company – ELFORA, now owns all the industrial abattoirs including associated facilities such as holding grounds for live animal exports. However, despite its large capital base and a promising start, the company has not been involved in export activities and recent newspaper reports indicate that the company's finances are in red. ELFORA's low performance will deprive the country of its export potentials since it owns all the industrial abattoirs. On the other hand, small export abattoirs established since the privatization have been successfully exporting meat from Ethiopia, though in small quantities (particularly after the RVF ban). In summary, the country's export level, in canned/chilled red meat or live animals, has decreased significantly since privatization.

The Government didn't have any specific policy on livestock marketing until the establishment of the Livestock Marketing Authority (LMA) in 1998 (currently under the Ministry of Trade). The LMA was set up with the objectives of promoting domestic and export markets by initiating policies, laws and regulations, issuing quality control directives on exportable and importable materials, encouraging and establishing staging points and quarantine stations for domestic and export trade, promoting the organization of livestock markets, abattoirs, skins and hides sheds, encourage the condition of research on the marketing of animal and animal bi-products etc[56].

[55] Interview with meat exporters (names withheld)
[56] Negarit Gazeta, Proclamation No 117/1998

Nevertheless, the LMAs' potential role is limited by a structural constraint that defines the roles and relationships between the Federal and Regional administrative structures in Ethiopia. As a federal structure, the LMA is not represented at Regional levels, and in the absence of this linkage, its visions, strategic plans and programs can't be shared or implemented at the grass-root level, by the appropriate agencies, where it matters most. In fact, when the LMA was established, Regional Bureaux of Agriculture had bigger expectations[57], and when this was not coming, the potentials for cooperation between the Regional Agricultural Bureaus and the LMA had gone sour. This attitude was recently demonstrated by the absence of regional representatives from attending an important situation analysis workshop held by the LMA despite invitations.

The relationships between the LMA and the Veterinary department of the Federal Ministry of Agriculture are not cozy either due to overlapping roles (in the areas of quality control and licensing) of the two institutions open for interpretations. Apparent differences are already emerging over the issue of health certificates, designs of slaughterhouses and payment modalities for meat inspectors made ambiguous by the Act that established the LMA. Such inter-institutional problems are likely to damage the export business if left unchecked.

Similarly, the role of the DVS at the Ministry of Agriculture is undermined by the Federal structure, as regional veterinary departments do not need to report to the national DVS. Regional veterinary laboratories are also region focused and reporting relationships between the regions and the DVS at the Federal Ministry of Agriculture are minimal. The Ethiopian Agricultural Research Organisation runs the national referral laboratory.

Some regional Bureaux of Agriculture collect data on livestock markets (for example the Oromia Region). However, the purpose of this exercise is not clear[58]. First, the information from the field arrives too late for any timely use. Second, the collected data are simply kept in the files. Third, the data are not available at the national level since they are kept at the regional offices. Unfortunately, structural constraints will not also allow the LMA to collect regular market data from the field since it has no representations. Other issues of concern as expressed by exporters include, but not limited to, the following[59]:

<u>Live Animals exporters</u>

- The National Banks' requirement that all legal exports be conducted through Letter of Credit in spite of traders exporting their animals against limited cash advances in most cases. Under this arrangement, the exporter is liable to pay the hard currency to the Bank if the importing country rejects the animals for any reasons. The Bank is probably unaware that most of the animals originating from the region are sold at a cash market in Jizan, Saudi Arabia.

[57] This view was repeatedly raised during an interview with the Oromia Agriculture Bureau, Livestock Marketing Team Members
[58] A staff in the Oromia Bureau joked that the data are useful for PhD candidates.
[59] These views were expressed by the exporters in a LMA study

- Distance of Customs Office from holding grounds – for example, the holding ground at Logia is some 200 Kms away from the nearest Customs office at Kombolcha.

Meat Exporters

- Cargo space problems;
- Flight cancellations despite the expenses incurred in processing export formalities;
- Takes a year to get sales tax reimbursements;

Hides and Skins exporters

- Transport problems;
- Occasional delays in obtaining customs certificate;

2.9 Planned and Ongoing Programmes

2.9.1 *Livestock Marketing Authority*

The LMA has two technical departments - Quality Control and Market Research and Promotion.

LMA Plans include interventions in three major areas.

Market Research and Information: The LMA has conducted a number of interesting studies and developed a set of guidelines in a move to initiate policy changes and determine the types of support services required to enhance the export of livestock and livestock by-products. These include: a study tour to explore the market potentials in the Gulf and some African countries; a study on the nature, volume, and impact of the cross-border livestock trade from Ethiopia; a document to initiate the collection and the dissemination of market price information for hides and skins; a detailed study on costs and procedures of live animals, chilled beef/mutton and skins and hides exports; guidelines on the construction of rural and urban slaughterhouses and processing sheds for skins and hides; LMA's findings have been used extensively in this report.

Infrastructure: There are plans, in the near future, to undertake feasibility studies for the construction of urban and rural slaughterhouses, livestock sale yards, staging points and primary processing sheds for skins and hides in strategic centers. It is planned to manage and maintain such facilities through service fees collected by the appropriate councils or the LMA itself.

Supplies: The LMA plans to improve the type, quality and health of animals. The strategy for achieving this objective is not clear yet.

In addition, the LMA played a pivotal role in initiating and seeing through the formation of the Live Animal and Meat Exporters' Association of Ethiopia.

2.9.2 *Live Animals and Meat Exporters Association*

The objectives of the Association include the provision of trade information (rules and regulations of importing countries, directory of importers, market trends and prices) to its members, facilitation of the trade environment (lobbying, pressure group), provision of forum for its members and organizing and participating in trade promotion exhibitions in country and abroad.

So far, the Association has been acting as a bridge between members and relevant government institutions, either through representation or distributing relevant information, has enabled members to gather and discuss critical issues such as import bans or customs procedures, has initiated and facilitated the participation of members at the Sharja trade exhibition in Dubai where contacts were made with potential importers from different countries.

Members only contribute 200 Br/year at the moment and an idea is being floated to charge members on their export volume in the future.

The ban has limited the roles the Association can play curtailing any incentive for members to pay more in contribution. Of the original 30 members listed with the Association, only 12 remain after the ban. Of these, 4 have their own abattoirs of various sizes and are active in the export market at the moment.

The Livestock and Meat Exporters Association operates at the national level. Here again, the structure of the Association is such that it is not capable of providing services for internal livestock traders, the main suppliers of livestock to the exporters. In fact, the domestic livestock traders, to whom the exporters are vertically integrated, have no association at all at regional or national level. Members contribute a minimal 200 Br per year. An idea is being floated to charge members proportional fees on the value of their exports. The Association was established with the support of the LMA.

2.9.3 ***Department of Veterinary Services****:* plans to build new quarantine stations/staging points in Moyale, Dewele and Teferiber in addition to the ones existing in Diredawa, Nazreth and Galafi. This program is funded by the *National Livestock Development Project,* (of the African Development Bank), which is focused on animal breeding and forage program including the control of CCPP and PPR in pastoral areas.

2.9.4 Southern Tier Initiative – A USAID funded pastoral program focused on income diversification, the provision of basic health and education and peace building.

2.9.5 ***GTZ*** runs the Borana Lowland Pastoral Development Program which includes market information collection and rural finance among its seven other components.

2.9.6 ***World Bank/FAO***- have prepared a Pastoral Community Development Project for the Pastoral Extension Team of the Ministry of Agricuture. The project focuses on[60] a) the development of an institutional framework to empower pastoral communities b) provide social and economic investment fund with components for demand-driven micro-investments, and c) a component for research and development for a various social and economic issues.

2.9.7 ***The African Development Bank*** has approved a grant of $920,000 for the establishment of a management information system in the Ministry of Agriculture including an updated database on pastoral areas, and a diagnostic analysis of potentials and constraints to pastoral areas.

2.9.8 ***The Ethiopian Agricultural Research Organisation*** (EARO) in collaboration with the USAID funded GL-CRSP is involved in Livestock Early Warning System (LEWS).

2.9.9 ***ILRI (GL-CRSP)/ PARIMA*** is working in pastoral areas on asset diversification for risk management in the Borana area.

2.9.10 ***NGOs***

SCF/USA and UK, COOPI, FARM AFRICA, CARE, LVIA, GOAL, PCAE, Gudina Foundation, AFD and EPARDA are involved mainly livestock health programs and other activities in pastoral areas. SOS/Sahel focuses on understanding the intricacies of the pastoral system to 'reinstate and strengthen the traditional common property management system.'

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[60] FAO/World Bank, A Pastoral Community Development Project for Ethiopia, Project Proposal, Discussion draft, December 5,2001

III Sudan

3.1 Livestock Resources and Off-take

The last livestock census took place in Sudan in 1976. Current official estimates of the livestock population are as follows:[61]

Table 3-1 Livestock population in '000

Year	*Cattle*	*Sheep*	*Goats*	*Camels*
1997	33,102	39,835	36,037	2,936
1998	34,584	42,363	36,498	2.974
1999	35,825	44,802	37,346	3,031
2000	37,093	46,095	38,548	3,108
2001	38,325	47,043	39,952	3,203

Source: MoAR/ FAO

Livestock production in Sudan is predominantly pastoral. Ninety percent of the livestock population is owned and managed by this sector. Livestock production provides livelihoods for some 20% of the population and livestock exports generate 25% of the national foreign exchange earnings[62].

Off-take rate for 2001 was estimated at 19.9% for cattle, 44.4% for sheep, 38.5% for goats and 16.4% for camels in 2001[63]. These figures imply a dramatic increase in the off-take rate of nearly 5 times for cattle, twice for sheep and 27 % for goats when compared to the official estimate in 1995[64]. On the other hand, MoAR figures indicate a marginal annual off-take growth level of 0.3% for cattle, 0.75% for goats 0.18% for camels and -0.3% for sheep for the period 1999-2001. Total red meat production was estimated at 1,578,000 MT for 2001. In all probability, the figures for the off-take rates seem highly inflated. Even at a higher consumption rate of 14 Kgs of red meat per capita, a population of 30 million would consume around 420,000 tons of red meat. At an average carcass weight of 150 Kgs for Sudanese cattle (Arab Agricultural Statistics Yearbook, 2000) this would translate into close to 3 million head of cattle or an equivalent livestock population in shoats, cattle and camels. Based on this fact, the actual off-take rate may be closer to the annual production estimates of hides and skins for Sudan, which are 2.5 million hides and 11 million skins [65] (this figure excludes skins and hides from live animal exports).

[61] Various parties contest the above estimates. The figures suggest a population growth of 45% for cattle, 55% for sheep, 62% for goats and 14% for camels between 1991 and 2001 alone. The MoAR concedes that an immediate census is required to establish the number of the livestock population for planning and development purposes.
[62] Statistics for Livestock Markets in Sudan, Animal Resource Services Company, 1999
[63] This translates into a colossal figure of 7.6 million cattle, 20.8 million sheep, 15.3 million goats and half a million camels being slaughtered in 2001.
[64] Official estimates for 1995 indicated an off-take rate of 1.5 million cattle, 10 million sheep and 12 million goats. Livestock and Red Meat Export Marketing Study, FAO/AAAid, 1997
[65] Ministry of Industry and Investment estimates

3.2 The Domestic Markets

Sudan extends over 2.5 million km^2. Major livestock production areas are scattered in the range of some 600-1,200 kms from the terminal markets. Migration patterns alternate in South-North and North-South directions bringing the herders close to the primary markets during the wet season and vice versa during the dry season. The efficiency of the marketing system is co-related to the distance of production areas and the seasonality of supplies (due to migrations), which in turn have led to the development of a unique internal livestock market system in Sudan.

The livestock markets of Sudan are highly broker-dominated and without any parallel in the region (there are 550 licensed livestock traders/brokers operating in the secondary market of Kosti alone in the small White Nile State). Some of these brokers may work as independent small-scale traders (*Jelaba)* and some as agents (*wakils)* or sub-agents for the big traders. The brokers collect cattle and shoats from the scattered villages and sell them to another broker in the primary markets. The second broker may sell to a third broker in the same market or in a secondary market and this process goes on until the livestock are bulked into larger lots and reach the terminal markets. The final transaction in the terminal markets is also processed through brokers. Agents or sub-agents also organize the trekking of cattle to the terminal markets for the big traders. Livestock are said to change hands a minimum of two and a maximum of six times between points of purchase and the final point of sale. Stock may change hands, if not actual ownership, a number of times until they reach the final point of sale. Terminal market prices may end up at least twice and in extreme cases four times as much as that of the producer's price[66].

The industry is fraught with shortage of working capital (cash flow) from bottom to the top. This is the result of both too many traders/brokers operating in a confined market and the rather too long turn-around time it takes to complete a transaction between the points of purchase and the terminal markets due to long distances. Informed sources suggest that it may take between 2 days to 2 months to collect 200 sheep from production areas. A livestock trader[67] in Muwele cattle market said that it has taken him one month to buy 100 head of cattle in West Darfur. As most livestock traders including exporters do not appear to have the financial means to tie up their capital for such a length of time, business is usually transacted through 'trust' and payment is effected long after the deal has been completed (1-3 months or even longer in export cases). This system also allows traders/exporters to pass the risks mainly to producers and to some extent to small-scale traders. The 'trust' system is built on personal relationships spanning for 2-3 generations. Needless to say, the producer is the last person to be paid under this system. Occasionally, the money may not come at all for various reasons.

The seasonality of livestock supplies has led to the purchasing of cattle in bulk (mostly under trust transaction) and keeping them in feedlots (April to June) around major market centers for the lean seasons. Livestock traders and wholesale butchery owners close to the terminal markets own many of these feedlots but increasing numbers of grain farmers are

[66] Interview with Omar Hassan Eldirami, Marketing Manager, Ghanawa Meat Trading company
[67] Interview with Adam Nur, Livestock Trader from Nyala

becoming involved particularly in sugarcane producing areas for additional income. Livestock supplies in Sudan peak September – February following the rainy seasons. Supplies drop during the hot months of March to May or June as trekking becomes difficult due to the deteriorating body conditions and the scarcity of pasture en-route. The feedlots fill the supply gap in the market (marked by price increases during this time) mainly with fattened cattle and to some extent sheep. The feedlots operate in 60 days cycles with average weight gains of between 1-2 Kgs per day per head of cattle. Feedlot operators complain about the increasing price of feeds (sorghum, oil cakes, groundnuts etc).

Sudan's major livestock markets (except Kosti market) including the terminal markets operate in a bizarre fashion called 'the Silent Auction System', in a manner that defies transparency. Under this system, buyers and sellers communicate only through third parties - brokers. A seller tells a broker his price range for the cattle or flock of sheep he intends to sale. The broker sits with the buyer and negotiates the price in secret. A deal is closed when the broker manages to negotiate successfully with the seller within the price range offered by the buyer. The purchase price will only be known to the buyer, the seller and the broker and kept secret from other parties. In El Muwalih market of Omdurman, the broker collects a fee of 10,000SP/cattle and 2,000SP/sheep from each party after closing a deal.

This system has outlived the ex-Livestock and Meat Marketing Corporation's (LMMC) attempts of introducing an open auction system through the provision of weight scales in the 11 major market centers it constructed. Statistics provided on market prices are approximate guesses and should therefore be treated with caution. The only exception is Kosti market where transaction takes place through an open auction, though scales are not used. This may appear as anomaly but the practice has been in use since the colonial days when the first meat processing plant in Sudan was built in Kosti in 1954.

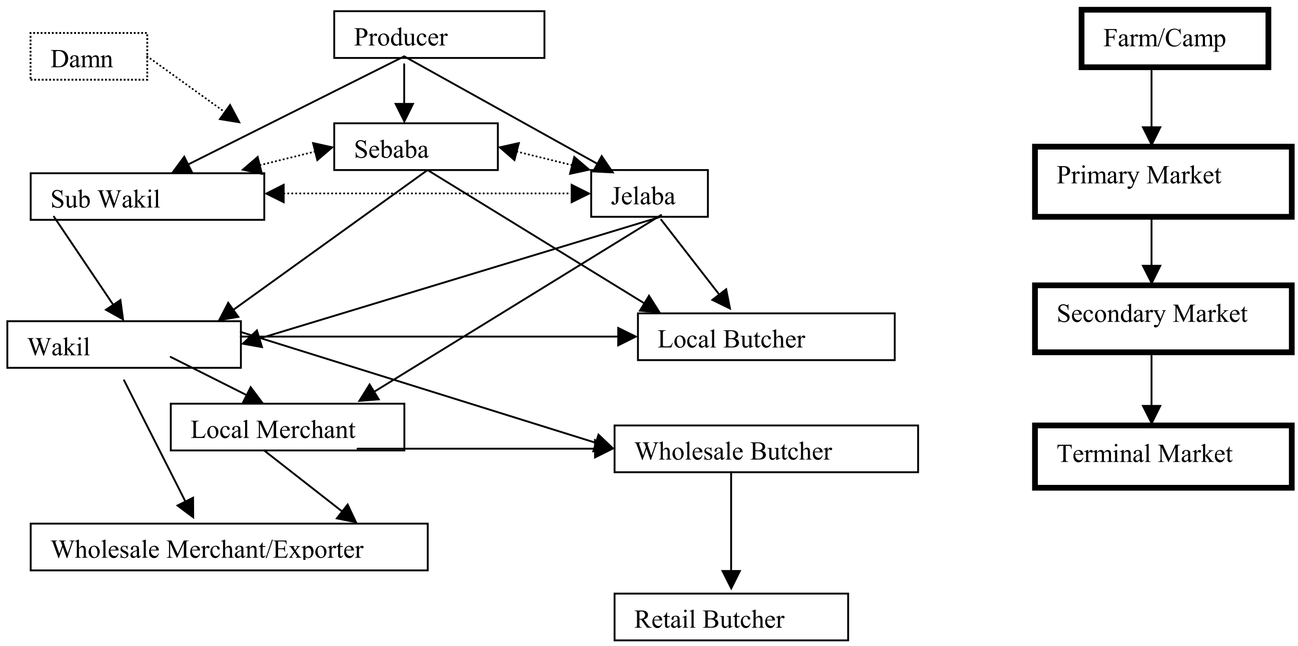
Transport problems in major livestock producing areas of West Sudan (South Darfur, South Kordofan) have led to the use of trekking mainly for cattle but also of sheep to the terminal markets. In the past, LLMC had partially reduced the problem through subsidies and by using block trains for livestock transport, which were imported for this purpose. The dissolution of LLMC in 1992 led to the abrupt end of this service and the block wagons are used for general cargo by Sudan Railways, though the Animal Resources Services co (a subsidiary of the Livestock Resources Bank) is putting a claim on the wagons. Trekking along well-defined traditional routes, which were partially improved through the provision of holding areas and boreholes by the ex-LLMC is the only means of moving stock from Western supply areas to the terminal markets.

Road transport can be expensive for cattle and unreliable. Livestock traders pay 3,000 SP/sheep for a distance of 600 KMs. However, it will be interesting to make a comparative analysis between trucking and trekking. Such a study should not be limited to comparing transport related costs only. It needs to incorporate costs of opportunity, the risks involved, the tying up of capital, the turn over rate, interest rates and other parameters. In the final analysis it should be measured in terms of marketing efficiency.

For example, a trader from West Kordofan said that it has taken him a month to buy 100 cattle and a further 75 days for four employees to trek the cattle to El Muwelih market in Omdurman. If it takes him another 10 days for selling the cattle, it means he requires 115 days to do one transaction. At this rate he cannot do more than two transactions in a year. In addition, he paid 1,200,000 SP for the leader of the trekking group and 600,000 SP each for the rest of the drovers bringing the total to 4,000,000 SP or $15/ head of cattle.

A network of agents, traders and brokers that have been established over a long time dominate the livestock marketing chain in Sudan. This apparently simple chain is characterized by many intermediate costs, which include commissions/margins/salaries and furthermore, costs of trekking, watering, feeding, and numerous types of taxes.

The Livestock Marketing Chain in Sudan[68]



The main livestock supply areas for both the terminal and the export markets are Northern Darfur (camels), Southern Darfur (cattle), Northern and Southern Kordofan (sheep) and the Eastern areas of the Nile States (sheep). Local breeds of sheep for export mainly constitute Hameri, Ashger (whose numbers are declining), Kabassi, Zagawi, Dubasi (few in numbers) and Watish from the Blue and white Nile area. Garej breeds are used for local consumption.

[68] Adapted and modified from Sudan Livestock and Red Meat Export Marketing Study, FAO/AAADC, February 1997

In the past, attempts to improve the efficiency of the livestock markets in Sudan consisted of establishing 11 major market centers with weighing scale facilities and auction yards, holding grounds and boreholes along traditional trekking routes and the provision of bulk trains (with 40 wagons) for livestock transport (subsidized heavily by the government). The LMMC, which was in charge of this operation, also tried to introduce open auction systems in the markets along with collecting weekly price information. The open auction system could not succeed due to the sabotage of brokers and because livestock purchases are based on the trust (credit) system[69] (open auction entails immediate cash payment). Fixed Government domestic meat prices and fixed exchange rates at the time were also barriers to the LMMC achieving its objectives.

LMMC was dissolved in 1992 and the States took control of the 11 market centers, raising a dispute between them and the Animal Resources Service Co (ARSC), the latter claiming to be the apparent heir of the LLMC. The States Municipal Councils still run the markets as the dispute is not yet resolved and charge on average some 3,000 SP/sheep and up to 10,000 SP/cattle for market and related services. A 1997 FAO/AAARD study indicated that the Nyala Municipal Council was charging a consolidated tax rate of 7,200 SP/cattle, 2,100 SP/sheep, 1,100 SP/goat, 8,400 SP/camel, 7,300 SP/horse and 5,150 SP/donkey under a variety of names - *service tax, local council tax, education tax, Nomads Union fees, Kenana canal fee, Animal Resources tax and market fees.* The ARSC, perhaps justifiably, points out that none of these taxes and fees is used for improving the marketing efficiency. In fact, nearly all the weighing scales installed by the ex-LLMC in the markets are buried under sand.

3.2.1 The Terminal Markets

Sudan is expanding the number of its terminal markets. Currently, livestock are exported directly from El Muwelih in Omdurman and Elobeid in Darfur through Port Sudan. Soon Kosti and El Gedarif will be upgraded as terminal markets for export when the quarantine stations under construction in these areas begin operations. Elobeid, Kosti and El Gedarif also double as secondary markets since they supply the El Muwelih market in Omdurman. The Omdurman markets, which include Abo Zaid, El Sheikh and Alamira also double as terminal markets for local consumptions. In Sudan, animals delivered to the terminal markets need to be accompanied with vaccination certificates for anthrax, BQ, CBPP, CCPP and sheep pox. Livestock without vaccination certificates are vaccinated before entering the terminal markets. Vaccination is carried out at a subsidized rate of 1000 SP/cattle.

El Muwelih is the largest terminal market in Khartoum (located in Omdurman) operating on Wednesdays and Saturdays serving both the domestic and the export markets (the MoFT is planning a separate market for export at the moment). A number of other smaller sheep markets also operate in Omdurman. The ARSC has also put up recently a new sheep market in the Dar Es Salam area of Omdurman in agreement with the

[69] Interview with Dr Isam Siddig Abdel Salam, General Manager, Animal Resources Services Co

Khartoum State, where market fees will be shared at a proportion of 75 and 25% respectively.[70]

Fees and taxes per cattle at El Muwelih include a market entrance fee of 1,500 SP, a tax of 3,000 SP and a market service charge of 12,000 SP. In addition, a brokerage fee of 10,000/cattle has to be paid if a deal is made. If not and the owner has to bring his cattle on another market day, an entrance fee has to be paid again.

The El Muwelih market operates under the 'silent auction' system. The market has watering provisions for humans and livestock. Feed is brought on trucks for sale. Unsold animals can be kept in the nearby feedlots for a fee until they are sold. This provision allows traders to keep their animals until they obtain the right price.

Available statistics on the number of animals offered in the in the Omdurman markets are unreliable since, for inexplicable reasons, there are significant annual variations. Part of the problem could be that mistakes are made in transcribing Arabic numerals into Western script. Whatever the reason, the figures provided should not be relied upon. The general guess is that up to 250,000 sheep, 100,000 head of cattle, up to 20,000 goats and a few hundred camels may be brought to the market annually. Major buyers in these markets are exporters and wholesale butchers.

Wholesale butchers buy cattle and sheep in bulk and take them for slaughter either to the Ganawa slaughterhouse (privately owned) or to one of the 9 Government owned slaughterhouses (2 big slaughterhouses and 7 slabs) and managed by Khartoum Animal Resources Services Export Co Ltd. The slaughterhouses generate about 50 million SP/month to the treasury from service fees charged at the rate of 15,000 SP/cattle and 5,000 SP/sheep. The wholesale butchers specialize either in cattle or sheep and keep up to 200 cattle or 4 - 500 sheep in feedlots for finishing. They slaughter about 30-50 cattle or 50-80 sheep at a time and sell the meat to retail butchers either directly or through intermediary wholesalers. The retail butchers pay one-third of the price upon collecting the meat and pay the rest after selling the meat (an extension of the trust system). Some of the wholesalers also run their own butcheries on the side. Small butcheries lack the necessary capital to run their own feedlots and have to rely for their supplies on wholesalers.

Wholesalers distribute beef at 4000 SP and mutton between 5000 and 5,500 SP/Kg. Prices may go down slightly between October and November and up between June and August. Nevertheless, the slaughterhouse managers said that meat prices have remained constant in Khartoum in the last five years. Retailer prices have been constant at 5-6000 SP/Kg for beef and 7-8,000 SP/Kg for mutton. Beef without bones may sell for 8,000SP/Kg. Figures provided on annual numbers of animals slaughtered in Khartoum were not reliable once again.

Apart from the butcheries, there are three small private meat processing plants in Khartoum specializing in beef sausages, burgers, ground meat, pastrami, kufta (a local

[70] However, the State is proposing to introduce additional tax for its coffer to the dismay of the ARSC.

version of meat balls) and mortadella (either meat or chicken). These plants seem to have a significant market share as their products are served in many small restaurants and sold in food groceries for home use. These food companies have played a big role in creating a fast food culture in Sudan while providing an added value market for meat and poultry in Khartoum, Port Sudan and other major towns connected by tarmac roads. Among the problems they mentioned were high bank interest rates and power shortages during the hot season that affects both their production and outlet points.

3.3 The Export Trade

3.3.1 Live Animals

Prior to the RVF ban and the discovery of oil, Sudan generated 20-25% of its foreign exchange earnings from live animals, meat, skins and hides exports. In 1999, the year before the RVF ban, the total number of animals exported from Sudan was about 1.8 million of which sheep constituted 88% followed by camels (9%) and goats (2%). The 1999 export figures indicated a significant growth in the volume of exports for sheep (172%), goats (171%) and camels (247%) compared to 1995. Live cattle exports has always remained low and declined further from 2,419 head in 1995 to 435 head in 1999.

Sheep are by far the largest live animal export from Sudan, with most going to Saudi Arabia. Only small numbers of cattle are exported to Yemen and Gulf states. Live goat exports are also limited in number and restricted to few countries. The live camel trade is gradually increasing in number with most going on hoof to Egypt and Libya. Sudan also exports limited number of live animals/chilled meat to Emirates, Qatar, Kuwait, Oman, Jordan and Abudhabi. Among these, Jordan is becoming a significant market for chilled beef (rumored as being re-exported to Israel) while Saudi Arabia remains the major destination for chilled mutton and to some extent camel meat.

Table 3-2 Live Animals Exports from Sudan

Year	*Sheep*	*Cattle*	*Goats*	*Camels*
1995	617,004	2,419	14,952	45,593
1996	1,001,705	9,609	30,940	72,021
1997	1,074,576	3,595	16,891	77,714
1998	1,584,858	3,236	48,187	133,426
1999	1,616,363	435	40,501	159,483

Source: General Administration for Quarantines and Meat (Ministry of Animal Resources)

Live exports declined significantly following the RVF ban in 2000 and particularly in 2001. However, Sudan is determined to make up for the lost time and increase its market share in Saudi Arabia following the lifting of the ban (on the grounds of anticipated shortage of supplies from other sources for the Haji season among other things) at the end of 2001. The authorities hope to reach a target export level of 2 million sheep and in unprecedented move have exempted live animal and chilled meat exports from Federal taxes for a period of three months.

However, increases in the numbers of live animals (and chilled meat for that matter) have not been matched by a corresponding growth in foreign exchange earnings despite Sudanese sheep attracting premiums[71] in some importing countries like Saudi Arabia (bolstered by a Sudanese community of about 1 million strong). Among the reasons given for declining foreign exchange earnings are increased competition from other supply sources (notably Somalia) and declining income in importing countries. However, Sudanese authorities also suspect exporters underselling live animals and keeping part of the foreign exchange abroad. This has prompted them to introduce minimum export price ceilings.

Table 3-3 Export Earnings in '000 US

Year	*Amount*
1995	103,058
1996	135,600
1997	128,442
1998	128,442

Source: Animal Resources Services Company

The pastoral production method in Sudan, like else where in the region, is not stratified for the domestic and the export markets. Better quality animals are selected for the export market among the common lot entering the overall market chain. The same companies that deal with local markets handle the export marketing. Animals of exportable quality are usually old, cattle being between 4-6 years and sheep between 2-5 years old. These are usually fattened near the terminal market for a period of 60-120 days for mature cattle and 1-3 months for sheep. Daily weight gains may go up to 2kg / cow and 200 grams/sheep but about 1.25 kg and 125-150 grams are more usual.

There are about 25 live animals exporters in Sudan, of which only about 12 are active[72]. The decline in the numbers of exporters has been partly due to some of the exporters inability to pay back bank loans leading to their arrest in the last few years (on the assumption of the exporters keeping part of their money abroad). Sudan has been shipping live animals to Saudi Arabia for nearly half a century resulting in long-standing business relationships between exporters in Sudan and importers in Saudi Arabia spanning 2-3 generations. This has enabled the parties to come up with a special arrangement whereby Sudanese exporters sell their animals directly in the open markets in Saudi. The Saudi importers collect their commission for facilitating the importation of the livestock into Saudi Arabia. The final price/sheep, obviously, could therefore be different than stated in the transaction documents (L/Cs, etc) – the initiative for the government to come up with minimum export price ceilings. On the other hand, many Sudanese exporters are said to run their business in traditional ways without giving due thought for regional or global market trends. Apart from not doing much to improve

[71] Sudanese sheep were said to command a price of up to 1,000 SD ($265) during the ban in Saudi Arabia. Current price levels have dropped down to 300 SD ($80).
[72] Ministry of Foreign Trade

production they are also said not to know the actual costs involved when exporting livestock[73].

Most animals are commonly transported by road or rail to Port Sudan. Traders complain about transport costs, especially of the railways Co. charging for empty returns on urgent shipments. The Railways Co has appropriated the 40 wagons purchased by the ex-LLMC for transporting livestock and this problem is likely to continue until the right ownership of the wagons is sorted out. Meanwhile, the Ministry of Foreign Trade is negotiating with the Railways Co, in a bid to get the tariff reduced. Congestion is common during the Haj season as the capacity of Port Sudan is limited to handling 35,000 shoats only at a time.

Livestock have to undergo a 21 days quarantine period for export certification. At times, the quarantine may take place simultaneously with fattening. In any case, the quarantine takes place in stages allowing the transportation of livestock in the meantime. For example, livestock bought in Omdurman are kept at the quarantine station there for 10 days while being fattened. Then they are moved to Kadero quarantine station (which is linked to the railway) for 5 days where further observations and Brucellosis tests takes place. Livestock are then transported for two days to Port Sudan where veterinary staff check them for a further 4-5 days before shipment. Soon, similar quarantine services will be provided at Elobeid, El Gedaref and Kosti markets allowing exporters to save time and money by shipping their animals direct to Port Sudan. The exporter pays all quarantine, vaccination (1,650 SP/sheep), feed and shipping costs.

Exporters are keen to help in the inspection of their animals as early detection prior to reaching Port Sudan permits the disposal of rejected animals in the local markets. However in spite of these procedures, 5-10% of the sheep and 3-5% of the cattle are rejected on health grounds at Port Sudan[74]. About 6% of the sheep may be rejected at Kadero due to nasal discharge, emaciation, broken legs and Brucellosis (the latter accounts for 2% of the sheep). Saudi Arabia also invariably rejects more animals (13-25% of sheep in 1994-1996). Of the 936,415 sheep returned from Saudi Arabia between 1990-1998, 77% were rejected on the grounds of sheep abscess or Morel's disease. This has initiated a discussion about producing vaccine for Morel's disease in Sudan. At times, the Saudis may reject the whole shipment because of 1 or 2 abscess cases. The same shipment may be allowed to enter on a second attempt.

The Sudanese authorities have been trying to forge a technical agreement with the Saudis in order to avoid such problems. Sudan has such technical agreements with Lebanon, Jordan (for meat) Egypt and Kuwait, which allows veterinary officers of importing countries to come and select the animals before they are shipped to eliminate rejection at the port of entry. Although there is a protocol between the Sudan and Saudi, for reasons which are unclear, the latter have remained reluctant to enter into such a technical agreement.

[73] Chamber of Commerce
[74] Livestock and Red Meat Export Marketing Study, FAO/AAADC, 1997

3.3.2 Meat Exports

A marked improvement was made in exports of chilled beef, mutton, goat meat and camel meat in the period 1995-99. A 172% growth in mutton, 282% in beef, 100% in goat meat and 50% in camel meat exports were recorded during this period. In fact, a higher growth rate was achieved in 1996 and 1997 than in 1999.

Table 3-4 Meat Exports in Tons

Year	*Mutton*	*Beef*	*Goat meat*	*Camel meat*
1995	2,143	939	134	8
1996	7,897.9	2290.	466	32
1997	7,943.4	4,136	500	12
1998	9,324.6	5,596	441	53
1999	5,826.6	3,585	361	16

Source: General Administration for Quarantines and Meat (MoAR)

There are about seven export quality abattoirs in Sudan of which four are operational (Port Sudan and Omdurman are closed). The operational four have a combined capacity of processing 14,500 shoats and 1,875 cattle/camel per day. Meat exports are entirely in the form of chilled whole sheep and beef carcasses and to some extent chilled goat and camel meat. Main export destinations are Saudi Arabia for mutton[75] and Jordan for beef. Chilled meat is also exported to Oman and Dubai in small quantities.

Table 3-5 Export Slaughterhouses processing capacity Per day

	Processing capacity	
Slaughter house	Shoats	Cattle
El Kadaro	4,500	775
JIMCO	4,000	200
Nyala	3,000	500
Ghanawah	3,000	400
Total	14,500	1,875

Source: General Administration for Quarantine and Meat (MoAR)

Three of the above are privately owned. The government owned El Kadaro is to be privatized soon bringing the ownership of export standard slaughterhouses out of the public domain in Sudan.

Apart from own exports, the abattoirs provide slaughtering and chilling services for other exporters and local meat traders at a fee (375 SD/sheep and 600 SD/cattle). In either case, the slaughterhouses operate at 50% capacity or below for most of the year except during the Ramadan season when demand peaks. The level of operations is dictated by a number of factors, the market demand in the importing countries being the primary reason. For example, according to the Marketing Manager of the Ganawa slaughterhouse[76], the daily demand for Sudanese lamb and mutton in Saudi Arabia does

[75] Despite importing live sheep, the Saudis require the removal of spinal cord from chilled/frozen carcasses.
[76] Interview with Omar Hassan Eldirani, Marketing Manager, Ganawa Slaughterhouse

not exceed 10 tons. This is because Sudanese lamb and mutton are expensive compared with that originating in Australia or New Zealand. Furthermore, the big importers and distributors give greater promotion to the latter since these realize better margins (margin levels are said to be double the level of Sudanese lamb and mutton).

Chilled meat is exported using extra cargo space on regular passenger flights. Charges of cargo services are high costing 1,400 SR ($373)/ton to Jeddah, 1,500 SR ($400)/ton to Riyadh, $350/ton to Oman and $500/ton to Amman. Exporters choices are limited to either using Sudan Airways or the national carrier of the importing country (if it is flying to Sudan). Chartered flights are more expensive since they demand payments for the back-load as was experienced by Nyala slaughterhouse, which was forced to close down, as a result of escalating air freight costs.[77] The use of available cold chain facilities by other goods at the airport also imposes a constraint to meat exporters.

At the moment (March 2002) in a bid to promote exports until the end of the Haj season, the Ministry of Finance (MOF) has exempted meat exporters from paying all federal taxes for a period of 3 months. Such Federal taxes and other fees, which the exporters have to pay at other times include but not limited to the followings:

- 5-10,000 SP for Chamber of commerce – certificate of origin;
- 60-70,000 SP for Saudi Embassy
- VAT 500 Sp/cattle and 300 SP/sheep ministry of finance but returned immediately after exports;
- Quarantine 1,000 SP/sheep, 2,000 SP/cattle;
- Customs and duties free (for 3 months), but 30,000 SP for using refrigeration facility at the airport;
- Bank charges of up to 80,000 SP/ton; however, traders export through Cash Against Document (CAD) to cut on bank charges.

3.4 Hides and skins

The skins and hides business in Sudan is dominated by the powerful traditional Raw Hides and Skins Exporters Association based in Omdurman. These exporters have agents all over Sudan who collect raw hides and skins on behalf of them. At times, they also provide butcheries with credit lines in order to secure the supply of hides and skins from them. Many of these exporters inherited the businesses from their fathers and grand fathers and enjoy long-established business connections with importers in a number of countries. Some of these exporting companies have been in the business for over half a century.

The industry was severely affected when the government prohibited the export of raw hides and skins from Sudan some seven years ago to promote the export of semi-processed skins and hides. However, the powerful association successfully lobbied with the government and managed to get the ban lifted leading to the resumption of raw hides

[77] The slaughterhouse is closed at the moment due to high costs of chartered flights and lack of markets for disposing offal

and skins exports in the last three years. Sudan, like Kenya, is currently exporting both raw and semi-processed skins and hides.
This scenario has led to a continuous rivalry between the raw hides and skins traders on one hand and the tannery owners on the other despite their interdependence. In fact, all the tanneries in Sudan get their supplies of wet hides and skins from the traditional exporters since the latter control all the raw supplies in Sudan through their agents in the major towns including the slaughterhouses. The traditional exporters opt to export raw hides and skins for the simplicity of it. As the owner of Yassin Trading Company put it "we only put salt. We do not have to worry about importing chemicals, disease problems (since the hair in raw hides and skins makes it difficult to detect), power shortage, labor management, sophisticated accounting system and so on." In fact, few traditional exporters who out of choice had to set up tanneries during the ban have now closed the tanneries preferring to export raw hides and skins.

The crux of the rivalry between the two parties is a conflict of interest. Traditional exporters realize better margins from the export of raw hides and skins despite a 15% export tax they have to pay compared to the tanneries paying a nominal 2-3% export tax on semi-processed hides and skins. The current FOB price for raw hides at Port Sudan is $1,400 per ton. The tanneries price for wet hides is about 12,000 SP per ton; or the equivalent of 24,000 SP per ton for salted and dried raw hides (about $9.25). Exporters emphasize that they realize a profit margin of up to 20% from raw hides and skins exports despite payments of 1,750 SP for grading and 240,000 SP/container for certification to the MoAR. They say the margin from the tanneries does not exceed 2% at most.

This coupled with the inability of many of the tanneries to pay in cash on delivery (due to liquidity problem) provides them with justifiable motives to maximize the export of raw hides and skins at the expense of the tanneries. Subsequently, what the tanneries receive is what the traditional traders cannot export either because of low demand or other reasons. In other words, the tanneries provide the traders with a second alternative market for any given quantity they cannot export. At the moment, the traders supply the tanneries mainly with wet skins as the demand for salted and dried skins is low in the world market. In summary, the balance of Sudans' raw and semi-processed hides and skins exports will depend largely on the international demand for raw skins and hides among other things. While raw hides and skins constitute 20% of the total exported from Sudan in the last one and half years, this balance is subject to change depending on the demand for raw hides and skins at any given time in the future.

The Ministry of Industry and Investment (MII) estimates the annual national production at 2.5 million hides and some 11 million skins.[78] The MII also suggests that, of this volume, some 300,000 hides and 1.2 million skins are used by traditional tanneries (estimated at 600) locally. Such traditional tanneries use low quality reagents and produce linings for foot wears, upholsteries, saddleries, knife sheaths etc.

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[78] This estimate of the Ministry of Trade and Industry may be closer to the national livestock off-take volume than all other estimates provided.

There are 17 tanneries in Sudan. They consist of 5 large (with two lines of production for hides and skins), 8 of medium size and 4 pickling plants. All these tanneries are privately owned (some were privatized few years ago) except the Jezira tannery where the government still holds a minor share. These tanneries have a total output capacity of about 1.25 million pieces of hides and 10 million skins per year. The MII puts the performance rate of the tanneries at 75% for skins and 45 to 50% for hides. Factors attributed for the low performance of the tanneries include: the resumption in raw hides and skins exports depriving the tanneries of supplies both in quantity and quality; liquidity problems of the tanneries and difficulties to arrange credit lines with the banks and that many of these tanneries are old and require renovations[79]

Sudans' exports of raw hides and skins have been lagging far behind the export of live animals and meat both in terms of volume and value. But, trends in the year 2000 and the first half of 2001 show a significant increase in exports. Exports for the 1st six months of 2001 were almost equal in both volume and value to that of the total for 2001 for raw hides and skins while exceeding in both volume and value terms for semi processed skins and hides in the same period. Many attribute this progress to liberalization and reduced intervention including access and repatriation of foreign exchange proceeds and the lifting of all taxes for a 3-month period currently at the federal level.

Table 3-6 Volume and value of raw and semi-processed hides and skins exports

Year	*Volume of Raw hides and skins*	*Value in US$*	*Volume -Semi processed*	*Value in US$*
2000	1,821 tons	1,326,000	8,504 tons	15, 576,000
2001 (6 months)	1,710 tons	1, 227,000	10,372 tons	21,151,000

Source: Ministry of Industry and Investment

Yet, many tanneries operate under financial liquidity problems to the extent of purchasing raw hides and skins from their suppliers on credit. Loan applications take long to process. The Islamic banking policy of Sudan operates in profit sharing or equity participation (*mubaraka).* Coupled with the high inflation rate the equivalent interest rate of this banking system was 48% two years ago though it has come down to 24% currently. Despite attempts at the federal level to promote exports through such incentives as the reduction of taxes and access to foreign exchange earnings, the States still levy various forms of taxes on hides and skins en route to the terminal markets.

Sudans' leather manufacturing industries have installed capacities for producing some 18 million leather shoes per year[80]. However, actual production of shoes has been limited to half of the estimated annual national demand of some 10 million pairs. As in Kenya and Ethiopia, the footwear industry has been severely affected by cheap imports brought in by

[79] Interview with Mohammed Wid Attala, Director of External Relations/Leather Industries Coordinator, Ministry of Industry and Investment
[80] Ministry of Trade and Investment

shanta (suitcase) traders from China and Turkey, which are widely suspected to dump export goods at prices below the cost of production[81].

In light of the growth in hides and skins exports, Sudan needs to review the numerous taxes and levies being imposed by the State governments. Despite the Federal Governments' initiatives to lower taxes raised at the central level, traders are still subjected to pay around 20 types of taxes by state governments. The authorities also need to review whether exporting raw hides and skins is still in the best interest of the country. FOB prices for 2001 indicate that semi processed skins and hides bring in 2.8 times per ton in foreign exchange compared to raw hides and skins. While the current preferential tax level may discourage the export of raw hides and skins to some extent, the government needs to take further steps to discourage the uneconomical exports of raw hides and skins altogether.

The authorities also need to take a critical assessment of the country's annual production volume in light of the existing capacities of the tanneries. The low supply of hides to the tanneries (45-50%) could possibly indicate that the tanneries may have double the capacity of the country's annual production level or the quantity available in the market minus the amount used by local tanneries. The installation of new tanneries, if any, should be abated until the performance rate of the existing tanneries is maximized to their full capacity.

The resumption of the Leather Technology Institute (established under a joint arrangement of UNIDO/FAO) for training purposes should be considered. However, investments in capacity building (staffing etc) and replacement of machinery will only be justified if plans are in place to run the institute as a profit making center or at least on self-sustaining basis. The incorporation of the needs of traditional and industrial tanneries into the curricula will also ensure their involvement on continuous basis for sustenance. Given the right direction, the Institute may serve as a training centre for the regional countries. The same modalities may be extended to the Raw Hides and Skins Institute in Omdurman.

3.5 Taxation

Sudan probably applies the most excessive and complex fees and taxation system on livestock trading in the region. Different sources vary but some studies[82] suggest that taxes and fees constitute up to 27% of the cost of the exported animal and may go up to 40% if fodder is included[83]. A good proportion of the taxes and fees go to Khartoum State (as a terminal point) though many of the 23 Federal States in Sudan rely heavily on livestock taxes as their primary source of revenue given the chance. Most agree that there are over 20 types of taxes and fees between points of purchase and Port Sudan.

[81] Beware the Bugaboo, Newsweek, 10 December 1992
[82] Abdu-el-Aziz Zuber, Deputy General Manager, Animal Resources Services Bank
[83] Ibid

Recently, the Federal Government (Ministry of Finance) exempted live animal and meat exporters from paying federal taxes and fees for a period of three months. This is unprecedented and needs to be encouraged. Whether the Federal States will follow suit is highly doubtable. Taxation begins at the livestock market centers and progresses as livestock move en-route to their final destinations. The burden of livestock traders was aptly described by Babiker Omar El Agib, ex Chairman of the Livestock and Meat Export Council at an Economic Conference in Khartoum.[84] The speech lists the various taxes levied from the point of purchase in Darfur en-route to Port Sudan.

3.5.1 *Sheep*

Taxes at the point of purchase in Darfur include:

1) Product tax per head
2) Livestock Market Charges

Passing through North kordofan:

3) Sodiri Local Council Tax

After reaching Omdurman:

1) Ombada Local Council tax
2) Animal Resources Bank Service Charges

From Omdurman to the Kadero quarantine area:

3) Kenana and El Rashed Scheme

Before reaching Kadero:

4) Halfaiya Council tax

Before entering Kadero quarantine the MoAR collects:

5) Quarantine entrance fees*
6) Vaccination fees*
7) Costs of blood tests*

On loading for transfer to the exporting port the charge to be paid is:

8) Kenana and El Rashed scheme (2nd time)

Where the main road to Port Sudan crosses the Hantoob Bridge yet again has to be paid:

9) Kenana and El Rashad scheme (3rd time)

Now in Gezira State and payments to be made are:

10) Political work support
11) Jihad tax
12) Gezira State support

When crossing the FAO supported El Rahad scheme yet again we have to pay:

[84] FAO/AAAID, Sudan – Livestock and Meat Export Marketing Study, Volume 1, 1997

13) Kenana and El Rashad scheme (4^{th} time)

Arriving at Port Sudan:
14) Public litter collection fee
15) Quarantine entrance fees

Other taxes include:
16) Finance tax – 2%*
17) Transport tax – 3%
18) Tax for the new port at Suakin
19) Export tax*[*]
20) Business profit tax
21) Occasional other unspecified taxes

3.5.2 *Camels*

Exports across the desert to Egypt include the following:

1) Livestock market charge at the point of purchase

Unless camels are bought at El Fasher in North Darfur the additional charges are:
2) El Fasher Veterinary Service charges
3) El Fasher security charges
4) El Fasher transport charges
5) Transit fees to bandits either in kind (including ransom of yourself) or very large sums of money

Arriving at Dongola, the charges to be paid are:
6) Ministry of Finance
7) Dongola Province taxes
8) Dongola Veterinary Service charges
9) Dongola Customs fees
10) Quarantine entrance fees
11) Vaccination costs
12) Dongola Quarantine administration charges
13) MoAR charges
14) Fee for certification
15) Abri province support fees
16) Abu Hamad veterinary service charges
17) Abu Hamad customs fees

[*] Currently, the Ministry of Finance has exempted traders from these taxes for a period of 3 months to promote export

3.6 Policies and Institutional Issues

Market liberalization in Sudan is going at full swing. Nearly all the slaughterhouses and tanneries have been privatized. New policies that encourage the export of livestock are being developed at least at the Federal level. One such encouraging initiative includes allowing traders to have unrestricted access to their foreign exchange earnings whether they want to use it for importation of goods, sell it to the bank or to a third party. This is an example which other countries, particularly Ethiopia and Kenya could well follow. Other initiatives include the exemption of livestock and meat exports from federal taxes for a period of three months and the preferential application of export taxes for raw and semi-processed skins and hides. Trade regulations involving such documents as Letter of Credit and Cash Against Document are relaxed. The Government imposes a minimum export price to thwart under pricing by exporters.

The MoFT sees its role as a moderator between the private business and the government. It issues export licenses and puts minimum ceilings (called minimum indicative prices) on the export price (claimed to be in consultation with exporters). Current minimum export price ceilings are $1,400/ton for beef, $700/ton for live cattle $1,665/ton for live sheep and $175/live camel. Sudan's famous racing camels are ceiled at $2,000/head.

The MOFT has formed Export Promotion Councils for major export commodity groups. The Live Animals and Meat Export Promotion Council consists of mainly exporters, members of other relevant institutions, randomly selected pastoralists and is chaired by the MoFT. Obviously, the exporters in this council are more influential than pastoralists due to wealth and proximity to the authorities than the latter. Meanwhile, the Councils were useful in easing some government restrictions, the most important of which was enabling exporters to make use of their foreign exchange earnings to import commodities or selling their hard currencies to third parties.

Still, exporters complain of the MoFT's minimum export price ceilings, high margin rate of the banks, transport costs of railways (11-18 SD/sheep from Khartoum to Port Sudan) and shipping vessels and limited holding facilities at Port Sudan (about 35,000 sheep/at a time). The MoFT in turn insists that the need for the minimum export price was borne out of the need to ensure that the business remains profitable since most exporters are traditional and not good enough in calculating their returns against their export costs. In fact, in the past few years, many exporters were put in jail on account of not being able to pay their bank loans (possibly due to high margin rates of the banks) and since then the number of active exporters has gone down from about 25 to around 12. Some suggest that the impetus for the current increase in export volume is borne out of the relatively higher profits earned from imported commodities (since the lifting of foreign exchange restrictions) than the profits made from live animals and meat exports *per se*.
The MoFT appoints commercial attachées in important foreign trade missions such as in Riyadh, Jeddah and Cairo to create market opportunities for Sudanese exports.

The liberalization, on the other hand, has left a vacuum after the demise of the LMMC. At present no single entity is in charge of the domestic livestock markets despite the involvement of the Federal States, the Animal Resources Bank, the MoFT and the MoAR in one way or another. Unfortunately, traders have to deal with all these entities in addition to the Ministry of Finance, customs, transport, aviation, banks etc. It will be difficult to envisage the formulation and development of pro-trade policies in the absence of one entity with overall responsibility to look after the improvement of livestock marketing. In fact, the current situation has led to the physical deterioration of the livestock markets and staging points built by the ex-LLMC and the acquisition of the livestock wagons by the Railways Co.

This has led to ownership contests of such infrastructure amongst the Animal Resources Bank (through its subsidiaries the Animal Resource Services and the Animal Transport Companies), Sudan Railways and the Federal states. The former puts its claim on the grounds of being the heir apparent of the ex-LLMC. Unlike the ex-LLMC however, the Animal Resources Bank and its subsidiary companies are designed to operate for profit. These include making profits from market fees, fees for staging points and hire of the rail wagons. This is a commendable idea provided the Bank maintains the market infrastructure and the wagons (including replacements) from its income and provided they reach an agreement with the federal states on how to share the income from market centers. At the same time, the Bank should also consider buying the properties from the MoAR, the previous owner, rather than planning to have them for free (as a share company, with only 23% government share, the Bank may not be in a position to take over a public property free of charge).

In another development, the MoFT, in collaboration with the Khartoum Federal State, has put up a separate livestock market for export only in Omdurman. The Animal Resources Company (of the Livestock Bank) has also put a new small market for sheep in Omdurman, under an arrangement where market fees will be shared by the Company (75%) and the Federal State (25%). The MoAR, on its part, has successfully negotiated with the Saudi Arabian Government to get the ban lifted and was on a mission in Libya in March for accessing the Libyan market. It has also hosted a Malaysian delegate in connection with possibilities for exporting cattle to that country. The separate initiatives are supporting the export trade as a whole. At the same time, they manifest the undercurrent that runs between these complementary and yet rival institutions as who is in charge livestock marketing overall.

Obviously, the Bank can't have a policy-making or regulatory role. Similarly, the MoFT, can't take over this role as it doesn't have representations at the grass-root level and has no mandate to improve animal production or health – a critical link required for developing appropriate policies. The MoFT is better suited to identifying new foreign markets, designing strategies to penetrate such markets and providing the necessary support to exporters. In addition, it can help in expediting the export process once animals have reached the terminal markets in Sudan but not before that. The Federal States, by design, focus on state-specific policies. Under the current scenario, this means raising fees and taxes from livestock markets to meet budgetary requirements for their respective states rather than trying to promote exports. The MoAR is naturally the appropriate ministry to house a Livestock Marketing Unit focused on developing pro-trade policies, enabling environments, the collection and management of market information, monitoring the observation of appropriate regulations etc. The Unit, in fact, can draw on its expertise on livestock production, animal health and quarantine to come up with appropriate and far-reaching policies.

3.7 Planned and On-going Programmes

3.7.1 Animal Health and Disease Control General Directorate

The Directorate runs three departments consisting of Animal Health, Epizootic Disease Control and Veterinary Public Health. Field operations are carried out through 10 mobile units attached to centers consisting of dispensaries, offices and storages. The mobile units (land rovers) function as field diagnostic laboratories, carry out vaccinations and provide AI services, treatments and surveillance. Furthermore, there are 62 mobile truck units, containing refrigeration units, mobile crushes and camp equipment provide vaccination services. Despite the costliness of these operations, additional 68 trucks have been ordered at a cost of some 750,000,000 SP to reinforce the unit and cover the whole country.

The Directorate has established a rinderpest Disease Free Zone stretching from The Red Sea and Kassala states in the Southeast to West Kordofan and the Northern State embracing 15 of Sudan's 23 states. Recognition of this zone by the OIE will obviously boost Sudans' export potentials. The Quarantine directorate administers the DFZ.

The Directorate receives an annual budget of some 15,631,000 SD ($60,000) from the MoAR. However, the bulk of its operational budget comes direct from the Ministry of Finance for project implementation. The operational budget of such projects currently include:

PACE/PARC -	23.5 million SD ($90,385)
Rehab. Of animal health -	45.5 million SD ($175,000)
Vaccination of national herd-	36.5 million SD ($140,385)
Disease free zone -	7 million SD ($26,923)
Mobile units (68 trucks)-	750,000,000 SD ($2,884,615)

Compared to its neighbors, Sudan has a formidable force of trained manpower in the animal health discipline, consisting of some 1,350 vets working in the public sector, about 750 in institutions and universities, some 1,075 private practitioners and 663 vets in various occupations. The distribution of veterinary drugs is privatized in Sudan.

In spite of the limitations imposed by the federal structure, the regional veterinary offices report simultaneously to the Federal Directorate and the relevant state bureau. The MoAR appoints staff in the regional vet offices. However, regional and referral veterinary laboratories are run by the Ministry of Science and Technology. There are 11 regional labs and one central reference lab in Sudan. The central referral lab provides staff, technical equipment and technical support to the regional laboratories.

3.7.2 *Quarantine Directorate*

The Quarantine Directorate provides quarantine services through its three departments – Vet quarantine, Meat Hygiene and Disease Free Zones. The department runs four quarantine stations in the country with the following capacities.

Table 3-7 Capacity of Quarantine Facilities

Location	*Cattle/camel*	*Shoats*
Port Sudan	4,000	71,000
Alkadaro	4,000	96,000
Wadi Halfa	4,000	46,000
Alrahad	-	10,000
Total	12,000	223,000

Source: MoAR

Quarantine operations are arranged on a rolling system. Export sheep are vaccinated and quarantined close to Omdurman market for 10 days. Further visual inspection is taken before entering the Alkadaro quarantine station (connected to a rail track) where they stay for 5 days and undergo brucelossis tests carried at the rate of about 20,000 tests a day (about 2% positive on average). The sheep are then taken to Port Sudan either by trucks or rail for a further quarantine period of 5-6 days before shipment begins. In one month alone (11 Jan-11 Feb), the quarantine department has processed 300,000 sheep to Saudi Arabia, of which 3,080 (or 1%) were rejected at alkadero station excluding some 370 sheep that died of various causes (emaciation, nasal discharge, broken legs etc). Exporters are keen to help with the quarantine process since early detection at al kadero enables them to sell the rejected sheep for the local market before reaching Port Sudan.

The Meat hygiene department assigns about 3 vets in each meat processing plant to undertake both pre-mortem and post-mortem examinations. The DFZ covers 14 Checkpoints along the west Nile, parallel to the Khartoum state.

3.7.3 *Meat Inspection, Hygiene and Grading Center*

The Center was established with the financial contribution of the Governments of Sudan and the Netherlands and with technical assistance from FAO. The Center trains students on Meat Hygiene and Inspection, Meat Processing and Grading, Slaughtering techniques and utilization of bi-products for a duration of some 45 days. So far, the Center has trained local and foreign students from Egypt, Jordan, Iraq, and Syria. Courses cost about 7 million SP for local and about 10 million SP for foreign students including full accommodation. The center has a small production unit for processing beef mortadella, beef sausages, burgers and smoked beef. This could serve as an ideal training center for the region to promote value-added and diversified meat products.

The Ministry of Animal Resources has played a major role in convincing the Saudi authorities to get the ban lifted. In March, the Ministry officials were in Libya for a new export initiative to that country. The Ministry's role in portraying the animal health status in potential importing countries is critical for the export trade.

3.7.4 *Animal Resources Bank (ARB)*

The Bank was established in 1993 with a capital of 5 Billion SP, which has now grown into 20 Billion SP (about $8 million)[85]. The bank is a public company with a 22% Government share and has some 21 branches throughout the country. The main objective of the bank is to support the livestock sector with a view to facilitate and promote livestock exports (other similar banks in Sudan include Farmers Bank and Agriculture Bank). Sudan Bank regulation limits ARB to operate a current account system only.

The banks' main activities are focused on assisting livestock traders overcome their liquidity problems by providing them with trade finance on short-term basis for transport, customs, LCs and LGs. Repayments for such trade finances have to be met within 2-4 months. The maximum short-term trade financing provided by the bank to an individual was in the region of $1.6 million. Total trade finance during the Haj season may peak up to $4 million.

The Bank also doubles as a trading house whereby it buys livestock from secondary and terminal markets and sell them at cost plus profit to exporters under a system called *Muharaba*. In addition, the Bank sometimes goes into a short-term partnership with exporter/s, whereby the profit is shared between the parties according to the contributions made. The Ghanawa abattoir was built and sold to a private company by the Bank (through PTA financing for the equipment).

The Bank operates two subsidiary companies - the Animal Resources Company and the Animal Roads Company. The former plans to rehabilitate and manage the 11 major livestock markets built by the LMMC (currently run by the federal states) and maintain them through service fees. It also plans to equip these markets with weigh scales and introduce an open auction system gradually in the livestock markets. It supplies veterinary drugs and relevant veterinary equipment, which are distributed through the branches of the bank and through dispensaries affiliated to the company in the states. The company also supplies facilities for AI, provision of spare parts for research equipment, equipment for slaughterhouses including ink for stamping. The company also manufactures molasses and distributes to the market. The Animal Roads Company plans to manage watering and staging points on stock routes plus administering the livestock wagons currently under the Sudan Railways Company.

3.7.5 Associations of Exporters

Sudan's exporters associations consist of Meat Exporters, Live Animals Exporters and Skins and Hides exporters. These Associations work closely with the Chamber of Commerce and are influential in the formulation of export-friendly policies. Regrettably, it was not possible to meet them due to the busy export season during the field study.

[85] Interview with Abd El Aziz Al Zuber, Deputy General Manager, Animal Resources Bank

Annex 1

Export Requirements in Kenya

1. Customs and Excise Department

Customs and Excise requirements for livestock and livestock products exports are similar to the general requirements for other export commodities as follows.

- Either one is registered with the Customs and Excise Department as an exporter whereby he is given an export code number
- Or he is licensed as a Customs Clearing and Forwarding Agent
- In either case, one must have a PIN (Personal Identification Number)

An alternative is to seek the services of a registered Customs Agent who is familiar with the documentation at Customs Department.

The exporter fills in Form C63, which specifies the following:

- What is being exported
- The clearing agent
- Means of exportation (air, sea, road)
- Point of exit
- Tariff classification
- Whether the goods are produced in Kenya or elsewhere
- Proportion of imported component (if any)

There are no duties paid on exports.

The following are the general payments made at the Customs Department:

- Kshs 250,000 Security is deposited with the clearing agent. For transit goods, the security is up to Kshs 1 million.
- Kshs 25,000 agent license.
- However, Customs and Excise require a specific authorization from MoARD, certified by the DVS that the livestock and livestock products (meat, hides and skins) are free from disease.

Normally, processing for exports at the Customs and Excise Department takes two days. However, they give priority to perishable goods e.g. the processing of meat and meat products take only a few hours.

2. MoARD

The Department of Agriculture does not have specific conditions for the export of livestock and livestock products. The main conditions are given by the DVS as indicated below.

(a) Live animals

- They must have a no objection permit from the point of origin that they are being transported/marketed. The 'no objection' permit certifies that the animals are from areas that are free from contagious disease, particularly, FMD, rinderpest and CBPP.

- They must also have a movement permit indicating the number of animals being transported, their origin as well as destination. Transportation is usually done using lorries for disease control.

(b) Meat and meat derivatives

- The animals destined for export must be slaughtered in designated export slaughterhouses. The specifications for construction and operation of these slaughterhouses are described in the Meat Control Act Cap 356 (Republic of Kenya, 1977) and detailed in the following Schedules:

  - Schedule A - gives the conditions and facilities for inspection of meat for export
  - Schedule B - gives the sanitation requirements
  - Schedule C - provides guidelines for inspection carcasses
  - Schedule D – gives instructions for disposal of condemned carcasses and parts
  - Schedule E – gives instructions for re-inspection of products and processes to be supervised
  - Schedule F – regulates the use of food additives and injurious substances in meat
  - Schedule G – gives instructions on canning of meat
  - Schedule H – gives instructions for marking or labeling of meat and meat containers
  - Schedule I – gives conditions for export stamps and certificates. In this Schedule, the Act specifically provides that:
  -

    (i) Upon application of the exporter, the inspecting officer in charge is authorised to issue certificates for shipments of inspected and passed meat to any foreign country. Certificates should be issued at the time the articles leave the export slaughterhouse, but if not issued at that time, they may be issued later only after identification and re-inspection of the meat.

    (ii) Export certificates are issued in serial numbers and in triplicate form. Each certificate should show the names of the exporter and the consignee, the destination, the number of the stamps, if any, attached to the articles to be exported, the number and type of packages, the shipping marks, the kind of product, the weight and any such information the consignee requires.

- Schedule J – gives instructions on recording keeping at the export slaughterhouse.

- The meat products should be free from diseases described in Schedule C. The main diseases that are currently of a major concern in European and American markets are BSE and FMD. CBPP is not a major problem as far as red meat is concerned because its survival rate in chilled meat is very short (Leete, 2001).

- Since every country has its own conditions for export, the exporter should enquire from the relevant Embassy for their export requirements and take those conditions to the DVS who assesses whether they can meet them or not.

(c) Hides and skins

Again, the major conditions for export of hides and skins are given by the DVS. An exporter is required to:

- Have a hides and skins movement permit. This certifies that the hides/skins are obtained from disease free areas. The main disease of concern is anthrax. The permit also shows the destination of the hides/skins. As long as the exporter has fulfilled this condition, he is given clearance to export.

Necessary costs to fulfill export requirements in Kenya

Export item	Institution	Main export requirements	Associated costs (Kshs)
Live animals	DVS	• Movement permit • Export permit • Inspection fee • Inspection time: 100 days for 3 consecutive negative CBPP tests	• 100 per copy • 0.5 per ton • 100 per cow; 25 per shoat • 1,000 per cow (feed)
	Customs Department	• Customs declaration form • Documentation	• Free • 1,000
	Insurance companies	• Insurance policy	• 10 per ton
	Ports	• Handling charges by the Kenya Ports Authority	• 2 per ton
	Income Tax	• Personal Identification No (PIN)	• Free
	Banks	• Current account	• 100,000 per account
Meat and meat derivatives	DVS	• Export permit • Inspection fee	• 0.5 per ton • 100 per cow; 25 per shoat
	Customs Department	• Customs declaration form • Documentation	• Free • 1,000
	Banks	• Current account	• 100,000 per account
	Insurance companies	• Insurance Policy	• 10 per ton
	Ports	• Handling charges by Kenya Ports Authority	• 2 per ton
	Income Tax	• PIN	• Free
Hides and skins	DVS	• Export license • Vet Dept Levy	• 150,000 per year • 2% export value of raw hides/skins • 1% export value of wet blue • 0.5% export value of processed leather
	Customs Department	• Customs declaration form • Documentation	• Free • 1,000
	Ministry of Agriculture	• Movement permit if collecting from farmers	• 5,000 per year
	Banks	• Current account	• 100,000 per account
	Insurance companies	• Insurance Policy	• 10 per ton
	Ports	• Handling charges by Kenya Ports Authority	• 2 per ton
	Income Tax	• (PIN)	• Free
	Other	• Railage	• 2.5 per ton

Annex 2

2.7 Export Procedures in Ethiopia

- An export license has to be obtained from the Ministry of Trade upon fulfilling the following requirements:
  ♦Duly completed application form in two copies;
  ♦Principal registration certificate;
  ♦An investment permit and residence permit if there is foreign partnership;
  ♦Memorandum and article of association or contract of partnership if private limited and share company; and
  ♦Payment of license fee - A minimum fee of Birr 25.00, which progressively increases with the amount of capital registered in the license.
  The license is renewable on a yearly basis.

The export process then passes through the following stages:

2.7.1 FIRST STAGE

1) Application and Registration of Export order - The export sales contract should stipulate the method of payment (letter of credit, advance payment, cash against documents, consignment note) for the exporters consignment.

2. Complete the Customs Declaration and submit to the International/Foreign business department of the bank.

3.Quality testing and certification – Goods need to be certified by the Quality and Standard Authority of Ethiopia (QSAE) to obtain Export Authorization Certificate. However, The QSAE delegates other institutions (with the expertise for certain types of goods) to undertake the task of inspection and certification. For instance the inspection of meat, and meat products and live animals (quarantine) is carried out by the Veterinary Department of the Ministry of Agriculture instead of QSAE. Also, the Islamic Affairs Office carries out Halal certification.

4. Documentation - The regulations of the importing country require certain documentation to accompany the export consignment, for example a certificate of origin to qualify for preferential treatment (or EUR I movement certificate for Europe or form A of the GSP for other countries).
All the above documents must be submitted to the Customs Authority.

2.7.2 SECOND STAGE

5. Request for delivery instruction from the buyer.
6. Book space through forwarder or directly with the carrier.
7. At this stage the exporter should decide about the package details including weights, measurements and cube.

2.7.3 THIRD STAGE

Upon knowing the name of vessel, cargo receiving dates, berth and destination port:
8. Confirmation of booking with forwarder/carrier;
9. Instructions on the movement of cargo from premises/ factory to port of discharge
10. Advice on freight booking;
11. Shipping note with precise shipping instructions to ensure that the main carrier or forwarding agent is aware of cargo handling and documentary requirements/disposal (issuance of the bill of lading);
12. Customs Declaration through the Customs Clearing Agents (CCA)-To avoid costly delays the exporter declares, all facts about the export consignment and supporting original documents should be supplied to the agents to enable customs formalities and authorization of the dispatch of the export goods. The exporter must hand over the following documents to the agents;
a) Export permit;
b) Copy of the Customs Declaration stamped with serial number of the bank;
c) Ethiopian Customs Declaration form;
d) Certificate of Origin signed by the Ethiopian Chamber of Commerce;
e) EUR I Movement certificate when exporting to the European Union markets;
f) GSP from A when exporting to countries offering the generalized system of preferences;
14. Insurance of export cargo; issuance of insurance certificate or policy document;
15. Transport documents;
16. Consignment note;
17. Advice of distribution of documents;
18. Banking instructions and payments;

2.7.4 Costs Associated with Exports

In addition to municipal councils, an array of government agencies and professional associations collect service charges and fees from exporters at the Federal level. The organizations, the level of charges/fees they collect and the type of services they provide are listed below (the list is incomplete).

1. Chamber of Commerce charges Br 40 for authenticating Certificate of Origin.
2. Ministry of Agriculture – provides health certificate for a fee of Br 10/head for up to 50 head of animals or a bale of hides/skins. Br 5 for every additional 50 head of animals or bale of skins/hides. District agricultural offices charge Br2/cattle and Br 1/sheep or goat for meat inspection services.
3. Maritime and Transit Service Organisation – Br 4/head for the first 50 head of cattle and thereafter Br 1/head; Br 1/shoat for the first 500 shoats and Br 0.55/shoat for the next 500 shoats etc; Br 35 per shipment of meat and Br 3,300 per container of hides and skins. Services include authorizing export documents, processing Customs and Quality and Standard Control Authority requirements and supervising the loading of cargo on vessels/planes.

4. Ministry of Health – Br 20 for the first ton of meat and thereafter Br 10 for every additional ton. Services provided include authenticating the product, approval of packaging material, verifying that the meat has been inspected by the MOA, checking the temperature of the cargo and the health status of the personnel involved in meat inspection.
5. Ministry of Foreign Affairs – Br 162/shipment of live animals and Br 486/shipment of meat for authenticating the Certificate of Country of Origin, Export Invoice, Health and Halal Certificates. This service is not required for hides and skins.
6. Customs – Br 50/ shipment to USA and Br/60 shipment to Europe for Certificate of Origin; Br 2/shipment for stamps.
7. National Bank / Commercial Bank – Br 20 for advisory services, service charge at 0.25% of sales value and sales tax, at 5% of service charge. This payment is for hides and skins only.
8. Quality and Standard Authority - Br 2,765 per container of hides and skins for providing laboratory services to ensure quality.
9. Municipalities charge BR 2 cattle and Br 1/sheep or goat where export abattoirs are located.
10. Islam Affairs Office – Br 50/shipment for Halal certificate
11. Embassies of Importing countries – Br 270 for entry visa
12. Civil Aviation – Br 10 for loading rumps

References

Kenya

Aklilu Y, 1999. Privatisation of Community-Based Animal Health Programmes: SPLA-Held Areas of Sudan, FIFC, Tufts University

Bourn, D. and Wilson, C.J. (1997). Galana ranch. In: Trypanosomiasis control in Kenya. Kenya Trypanosomiasis Research Institute (KETRI), Muguga.

CBS (Central Bureau of Statistics) (2001). Human population census. Vol I, Nairobi.

Department of Veterinary Services (2000). Hides and skins improvement and leather development status report for the last ten years.

FAOStat,1990-1998

Irungu, P. (2001). Formalisation of Village Peace Committees in the Karamoja Cluster. A Consultancy Report for the CAPE Unit of OAU-IBAR, August 2001.

Leete, D. (2001). A feasibility study for an abattoir in Laikipia. The Laikipia Farmers Committee.

LMD. Undated. Marketing of Livestock and Livestock Products in the ASAL areas, unpublished.

Kibunja, C.D. (1976). Meat retailing system in Nairobi. MSc thesis, University of Nairobi.

Kariuki, Richard. 2000. Livestock Marketing From Pastoral Areas of Kenya, A strategy for Pastoral Development, ALRMP, SNV, OXFAM (GB), World Concern

Ministry of Agriculture (MoA) (1996). Animal Production Division Annual Report, Hill Plaza, Nairobi.

Ministry of Agriculture and Rural Development (MoARD) (2001). Range Management Division Annual Report, Hill Plaza, Nairobi.

Ndii, D. (2001). Economic Imperatives in the context of Kenya's political transition (2001-2003).

Omiti, J. (2001). The status and policy options of the meat sector. An invited public address at a public forum organised by the Institute of Economic Affairs on Livestock Production Potential of Kenya's Dry Lands, Norfolk Hotel, 17th October, Nairobi.

Omiti, J. and Irungu, P. (2002). Institutional and policy issues relevant to pastoral development in Kenya. Discussion Paper No. 031/2001. Institute of Policy Analysis and Research (IPAR), Nairobi.

OAU-IBAR (2001). Pastoralist harmonisation initiative second international meeting. Mbale, Uganda.

Range Management Division Annual reports (1995 and 2000). Hill Plaza, Nairobi.

Republic of Kenya (1977). Meat Control Act Chapter 356. Government Printer, Nairobi.

Republic of Kenya (1972). The Animal Diseases Act, Chapter 364, Revised Edition 1989, Government Printer

Republic of Kenya (1962). The Stock Traders Licensing Act, Chapter 498, Revised Edition 1983, Government Printer

Republic of Kenya (1963). The Stock and Produce Theft Act, Chapter 355, Revised Edition 1982, Government Printer

The East African (2002). 'Ban on beef is unfair, Kenya tells Tanzania'. January 21-27, p. 25.

Wario A , 2001. Background Information, Kenya Livestock Marketing Council

World Bank, Review Mission. 2001. Aide Memoire, Arid Lands Resource Management Project

Ethiopia

Addis Ababa City Council Agricultural Bureau. 1996/1997. 1996 Annual Report. Addis Ababa

Ibid, 1997/1998. 1997 Annual Report. Addis Ababa

Ibid, 1998/1999. 1998 Annual Report. Addis Ababa

Ibid, 1999/2000. 1999 Annual Report. Addis Ababa

Ibid, 2000/2001. 2000 Annual Report. Addis Ababa

Ethiopian Agricultural research organization. 1998. Cattle meat (Beef) research program Strategy. Animal Sciences Research Directorate. Addis Ababa. Ethiopia.
Ethiopian Customs Authority. 1996. Annual External Trade Statistics. Issued by Statistics Department of Custom Authority. Addis Ababa. Ethiopia.
Ibid, 1997.
Ibid, 1998.
Ibid, 1999.
Ibid, 2000
Ethiopian Export Promotion Agency. 2001. Profile of The Meat Sub-Sector. Product Development and Market Research Directorate. February, 2001.
Ethiopian Export Promotion Agency. 2001. Study on raw hides and skin and leather products. Production promotion and market study Directorate. First draft. November, 2001.Addis Ababa, Ethiopia.
FAO. 1998. Yearbook. Production. Volume 52, 1998. Rome, Italy.
FAO/Giles Stockton, 2001. Support to Livestock Exports-Northern Somalia and the Sub-Region (EXCELLEX)
Federal Democratic Republic of Ethiopia. 1998. Proclamation No 117/1998, Animal, Animal Products and By-products Marketing Development Authority Establishment, Negarit Gazeta
Livestock Market Authority. 2000 . Problems and suggested solution of livestock markets. November, 2000.
Livestock Market Authority . 2001. Study on different payments on live animals, meat and hides and skins export trade. Market Research and Promotion Department. May, 2001. Addis Ababa, Ethiopia.
Livestock Marketing Authority.2001. Brief Baseline Information on Ethiopian Livestock Resource and Trade, Addis Ababa
Ministry of Agriculture. 2000. Assessment Report on Livestock Improvement and Multiplication Ranches in the country. Animal, Fishery and Animal Health Technology and Regulatory Department. October, 2000.
Ministry of Agriculture. 2001. Draft Agricultural policy. Ethiopia Federal democratic republic, Ministry of Agriculture, February 2001, Addis Ababa, Ethiopia.
Ministry of Agriculture. 1995. Livestock Marketing Study, Orangewoud International in association with RDP Livestock Services
National Bank of Ethiopia. 2001. Annual Report 1999/2000 (Ethiopian Fiscal Year 1992). NBE Addis Ababa, Ethiopia.
National Bank of Ethiopia. 2001. Quarterly Bulletin. Fiscal Year Series. Volume 16,No.3. NBE, Addis Ababa. Ethiopia.
World Bank/FAO, 2001. Pastoral Area Development in Ethiopia
<u>Sudan</u>
Animal Resources Services Company, 2000. Statistics for Livestock Markets in Sudan 4th Edition, 1999
Animal Resources Services Company, 2001. Statistics for Livestock Markets in Sudan, 5th Edition, 2000
Animal Resources Services Company, 2002. Statistics for Livestock Markets in Sudan 6th Edition, 2001
Arab Organisation for Agricultural Development, 2000. Arab Agricultural Statistics Yearbook, Volume 20, December 2000, Khartoum
FAO/Arab Authority for Agricultural Investment and Development, 1997. Livestock and Red Meat Export Marketing Study, Vol I
FAO/Arab Authority for Agricultural Investment and Development, 1997. Livestock and Red Meat Export Marketing Study, Vol II
FAOStat, 1990-1998