

DRAFT ONLY

Regulating the Livestock Economy of Somaliland

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Introduction

Pastoralism, in one form or another, is the primary production system in Somaliland. The majority of people directly or indirectly obtain their livelihoods from animal husbandry, and the resilience of this mode of production has been critical to Somaliland's recovery from the war. Taxation on livestock exports is the main source of government revenue and of funding for the re-establishment of government institutions. As pastoral production is closely linked to the social structure of pastoral groups, pastoralism as a 'way of life' has a profound impact on the politics and culture of Somaliland.

Various economic, social and environmental problems threaten to undermine this economy and the pastoral nomadic way of life. The WSP Somaliland Project Group therefore identified the status of the livestock economy as an Entry Point for in-depth research. A Working Group was formed to take this forward, comprising livestock traders, members of the Somaliland Chamber of Commerce, government officials, elders, professionals and local and international NGOs. After lengthy discussions, the Working Group identified three themes on which to focus the research:

- Livestock trade
- The pastoral environment
- Animal health services

Three workshops were held on these themes between August 2000 and March 2001. The first, on the subject of the livestock trade was held in Burco, the second, on animal health, was held in Hargeysa and the third, on the environment, in Oodweyne. Workshop participants included regional and district government officials, Ministry of Livestock officials, pastoralists, livestock exporters, brokers, butchers, enclosure owners, veterinarians, drug importers, women's NGOs, charcoal makers, fodder farmers, berked owners, members of the Chamber of Commerce, transporters and members of the media. This study is based on discussions and recommendations generated by these workshops, as well as meetings of the Working Group, additional interviews and a review of relevant literature.

A symbiotic relationship exists between livestock production and the environment, and the social and economic well-being of the population is thus greatly affected by environmental and meteorological conditions. The study begins, therefore, with a brief description of Somaliland's environment and climate. The livestock economy is then described within the context of Somaliland's emerging post-war economy, before the themes of trade, marketing, and animal health services are dealt with.

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An Overview of the Somaliland Economy

The Somaliland economy has undergone important structural changes since the war. In a deregulated free market economy, the private business sector has grown rapidly. The dissolution of state monopolies and rigid economic controls, together with private sector expansion, has significantly contributed to the growth of Somaliland's economy in the aftermath of war, providing employment opportunities and capital investment for the process of reconstruction. Trade through Berbera port has surpassed pre-war levels. The service sector has experienced rapid growth in the post-war period, with a proliferation of companies providing the latest communication facilities, airlines and financial services. Small enterprises like bakeries, restaurants, convenience stores and office supplies have returned to the marketplaces of the urban centres.

The Productive Sectors

Livestock production

Much of Somaliland's post-war economic growth has been linked, directly or indirectly, to the livestock trade. Livestock husbandry is the dominant system of production in Somaliland. Over half the population of Somaliland is involved in some form of animal husbandry, either as nomadic (or transhumant) pastoralists or as agro-pastoralists. Always the backbone of the economy before the civil conflict, livestock production continues to be main source of daily subsistence for nomadic families and the main source of income and employment for urban dwellers. According to the Somaliland Ministry of Agriculture, about 60% of Somaliland's population relies for daily subsistence on the main livestock products, meat and milk (Ministry of Agriculture 1998). Livestock production is estimated to represent 60-65% of the national economy (Ministry of Agriculture, 1998), and government revenue is heavily dependent on livestock exports. Between 1991 and 1997, livestock export on the hoof grew considerably, exceeding pre-war levels when Somaliland exported some three million heads of livestock in 1997, mostly to Saudi Arabia (UNDP, 1998). The value of livestock exports in 1997 was estimated to be US\$ 120.8 million, yielding as much as 80% of the total hard currency income for Somaliland's population (UNDP 1998).

Four species of domestic livestock - sheep, goats, camels and cattle - are reared in Somaliland. Sheep and goats are herded in the largest numbers, although trends in population growth, increased sedentarisation and markets demands have resulted in greater numbers of cattle being reared in recent years. No concrete data exists on the present

number and distribution of livestock in Somaliland.¹ Many observers believe, however, that numbers of livestock have been decreasing during the 1990s, as result of pastoral rangeland degradation and insufficient of grassing space in some areas. Even at a time in which livestock export ban by Saudi Arabia has minimized exports from Somaliland, participants in this study asserted that the livestock population is not increasing, because most of the livestock for export comes from beyond Somaliland's borders. There are also indications that pastoralists are selling more animals at lower prices into local markets in order to compensate for their lost export earnings as well as for household consumption.

Nomadic pastoralism is a complex and sophisticated system, well adapted to Somaliland's arid environment, and the most efficient way of exploiting the erratic seasonal forage and water conditions. However, environmental pressures, inadequate infrastructure, substandard veterinary services, and the impact of commercialisation on the livestock economy threaten this mode of production and the nomadic way of life. There are numerous pressures on the pastoral environment. Some are natural, such as declining rainfall, recurrent drought, wind erosion and flash floods. There are few figures to substantiate complaints of declining rainfall throughout the country; however, community elders and concerned professionals believe that there is a general decline in precipitation and that rainfall has become more erratic. For example, in Gabiilay District of Hargeysa region, where precipitation readings were recorded between 1992 and 2002², precipitation has declined slightly and has also been very erratic. According to a researcher with the international NGO known as Cooperazione Italiana Nor Sud (CINS): "One month or one week it rains heavily and the other weeks or months it just trickles. When you add up these readings it might be slightly less than the annual average in previous years, but other factors such as rising temperatures, high run-off, and evaporation, combine to diminish the rainfall effectiveness."

Other pressures on the environment are man-made, such as the increase in the number of water points and settlements (two related phenomena), the increase in off-road vehicle traffic, charcoal production, the expansion of enclosures and excessive livestock numbers. These factors have contributed to the degradation of the pastoral rangelands, notably through deforestation and overgrazing. Indicators of serious land degradation include gully erosion, changes in the composition of vegetation species, a decrease in vegetative cover and the spread of sand dunes. As discussed below in the section on Rangeland Degradation, the pastoral habitat has been changing over a long period of time and these concerns have been expressed for almost as long. However, as result of the cumulative pressures on the pastoral environment, there is growing evidence that the limits of Somaliland's ecosystem to support current levels of livestock production may soon be reached, if they have not already been surpassed (WSP/SCPD, 1999).

¹ The last livestock population census in Somalia was in 1975. The Somaliland government's estimate of the livestock population given in chapter 3 is based on an extrapolation from the previous census.

² Readings taken by Cooperazione Italiana Nord

Agricultural production

About 10% of the total geographical area of Somaliland is classified as suitable for cultivation, of which some 3% is actually under cultivation (GOS, 1999). Rain-fed agriculture in Somaliland dates back to turn of the twentieth century. Significant expansion in rain-fed cultivation, combined with cattle production, took place in the early 1930s. For several decades, however, rain-fed farming has been in decline with some of the most productive areas (such as Tog Wajaale, Xaaxi, Gatiitaley, Beerato and Beer) either falling into disuse or being used solely for fodder production. The decline in land crop production is largely due to the disruption of the prolonged civil war and the ‘Scientific Socialist’ agricultural policies of the Barre’s regime, which removed the economic incentives for the farmers. Farmers were forced to sell their harvest to Agricultural Development Corporation (ADC) at prices lower than the market price. A popular jibe among the farmers at the time mocked the predatory nature of the state monopoly, noting that “birds and the ADC only show up at harvest time” (WSP/SCPD, 1999).

Crop production has resumed in Somaliland after the civil war, concentrated mainly in the western districts of Gabiley, Baki and Borame in Hargeysa and Awdal regions. In these two western regions about 2% of land is classified as arable (Ibrahim, 1997). The average farm size is 8 hectares. The main crops are sorghum and maize, respectively utilising about 70% and 25% of the available rain-fed farmland (GOS, 1999). Other crops such as cowpeas, millet, groundnuts, beans and barley are also grown in more marginal areas.

Estimated Area, Production, and Yield of Sorghum and Maize 1996-1998

Year (Gu’ season)	Area (Ha)	Production (Tons)	Yield (Ton/Ha)
1996	29,008	39,000	1.34
1997	29,008	23,720	0.82
1998	29,008	10,675	0.37

Source: The Ministry of Agriculture. The area refers to net cultivated area.

The annual total area under cultivation is, on average, only 29,800 hectares., compared to 60,000 hectares prior to the war. Although yields per hectare were higher in 1996 and 1997 than the pre-war level of 0.6 ton per hectare, production has been declining. The gu’ crop production in 1997, for example, was less than 1996, even though rainfall was better (Ibrahim, 1999). One reason is that farmers are utilising less than half of their available land for cultivation. The strength of the livestock sector and earning power of local livestock markets in the 1990s, among other factors, encouraged agro-pastoralists to favour animal husbandry over crop production³. Another factor that has contributed to the decline of crop production has been the provision of relief food to Somali refugee camps in Ethiopia. This has limited the marketability of locally produced sorghum and maize, as many Somalilanders

³ Crop production exceeded animal husbandry only in areas of greatest rainfall.

have become accustomed to wheat products due to their experience as refugees. Competition from the rations supplied to refugees in Ethiopia, which is often sold in local markets, has also forced farmers to sell their produce at lower prices. In addition there is a labour shortage in the agricultural sector, since many local youth who see no future in farming are attracted to economic opportunities the cities.

Irrigated farming

In contrast, irrigated farming in Somaliland has increased substantially over the last two decades⁴ (WSP/SCPD, 1999). This type of irrigated farming, also known as “tog farming”, is mostly conducted along the banks of dry riverbeds and perennial springs, producing fruits and vegetables. Some farmers use reservoirs for harvesting rainwater for irrigation.⁵ Others sink shallow wells along the riverbanks or in the middle of the dry riverbed, with water pumps used to raise the water. In Sanaag region and to lesser extent in Saaxil, gravity irrigation from natural spring is more widely used.

The spread of irrigated farming activities within the country has been made possible largely by consumer demand for agricultural products in rapidly growing towns and cities, as well as the large pool of displaced people with farming experience from Somalia. In Sool and E. Sanaag especially, many, who fled from Ceergaabo during the civil-conflict have developed farming.

The level of fruit and vegetable production is currently sufficient to meet local demand, while providing a limited surplus for export. However, climatic and technological factors, such as shortages in water during the jilaal season, lack of simple processing techniques, as well as competition from Ethiopia, together inhibit producers from expanding production and being able to supply the market steadily and consistently throughout the year.

Fisheries

The Somaliland coastline extends for 850 kms. Between the continuous chain of mountains along the coastline and the sea is a narrow maritime plain. Somaliland’s coast has diverse biological and physical attributes. The coastline is relatively straight with few bays and consists mainly of beaches. A raised fossilised seabed backs onto many of the beaches, which are dissected by a series of riverbeds and valleys running south to north. Somaliland possesses rich fishing grounds, which could potentially support a valuable fishing industry and contribute to the nation’s food security and socio-economic wealth (IUCN, 1997).

⁴ Some of the prominent irrigation communities across the country include: Qabri Baxar and Ruqi (Awdal), Ceel Bardaale, Ceel Giniseed, Cadaadley, Arabsiyo and Allay Baday (Woqooyi Galbeed); Dhaymoole and Bixin (Saaxil); Dayax, Hareed, (Sanaag); Boocane (Sool).

⁵ Allay Baday, south west of Hargeysa, are one the communities have utilised such reservoirs extensively.

The coast can be divided into two coastal environmental regimes (Stromme, 1987):

From Djibouti Border to Raas Surud: This coastal stretch is characterised by sandy beaches interrupted by rocky outcrops and cliffs, river valleys, and natural shelters or islands. The Saad-ad-Din Islands near Saylac are rich in coral reefs, with a total of 99 shallow water coral species recorded in 1997 (McClanahan & Obura, 1997). Maydh Island, which lies 12 kms off shore is an extremely important nesting and roosting site for seabirds. Localised sub-tidal coral reefs are found in protected areas, such as to the west of Berbera's natural harbour (IUCN, 1997). The biodiversity of this coastal area is very high as it contains elements of fauna from the Indian Ocean, Gulf of Aden, Red Sea, and Arabian Sea (McClanahan, 1997).

From Raas Surud to Puntland Border: This is a transition zone between the major area of upwelling waters to the east and the stable tropical reef ecosystem to the west. Rocky reefs covered with algae dominate the environment. Seasonal blooms of phytoplankton, which occur during incursions of upwelled water, are exploited by migratory pelagic fish (IUCN, 1997).

A survey conducted by IUCN in 1999 along 165kms of the coastline, has confirmed the abundance of live marine resources in Somaliland's marine ecosystem (IUCN, 1999). The survey found the area studied to be productive and relatively pristine. Diverse species of reef fishes, pelagic fishes, cetaceans, birds, turtles, coral reefs, fauna, seaweed, and mangrove were recorded in the survey (IUCN, 1999)⁶.

Some small-scale fishing takes place along the coast of Somaliland, mostly centred in Berbera, Seylac, Maydh and Laasqoray. Small boats, with various sizes of gill nets work out of these locations. Fishing operations in and around Berbera are mainly for local consumption, although since the mid-1990s consumption of fish in Hargeysa, Burco and Berbera has expanded. Around Maydh and Laasqoray sharks are especially targeted, but with only the valuable fins being landed for export. In Laasqoray where the first tuna canning factories were built in the mid-1960s, entrepreneurs have established a new fish-canning factory with all its subsidiaries, which began its production on 19th November 2001. Apart from the limited support of the international NGO COOPI in Berbera, by rehabilitating the freezing facilities and providing ice to the fishermen, no other organised fishing activities have received international help in the past decade.

The Somaliland authorities and the coastal inhabitants are deeply concerned by the illegal activities of foreign fishing vessels in their waters. The government does not have the means to patrol its own coastline to prevent foreign incursion in to Somaliland's Exclusive Economic Zone (EEZ).

⁶ For further details on the composition of these diverse species, see (Schleyer, Baldwin, 1999).

Frankincense

Frankincense production was a small but lucrative business before the war. Most of the frankincense production in Somaliland takes place in Sanaag region, in the highland forests of the Gollis mountain range. At present two types of commercial frankincense are collected: *maydi* (*Boswellia frereania*) and *beeyo/moxor* tree (*Boswellia carteri*). All the frankincense growing areas are divided into *ardaas* (units). On average an average ardaa can produce about five camel loads (625 kg)⁷ of gum and there are about 600 *ardaas* in Somaliland.

Prior to the war the frankincense trade was state-controlled, but both the trade and its regulatory mechanisms were disrupted during the civil war. Discussions with frankincense dealers suggest that while export has gradually resumed, the scale of trade today is smaller than in the pre-war period. Reliable statistics are not available in support of this claim.

One way to improve the marketability of frankincense products is to refine them as oil⁸, close to the sources of production (Progressive Intervention, 2001). Distilled frankincense oil can be used to make a variety of products (ibid.):

- Perfumes/fragrances and flavours
- Medicine/nutraceuticals
- Cosmetics/body care
- Soap/detergent
- Incense/Aromatherapy
- Mineral Resources

So far, no mineral resources of economic importance have been found in Somaliland. Deposits of iron ore, manganese, muscovite and sulphur are too sporadic to be of economic significance (Hunt, 1960). More recent studies indicate that fossil coal is present in the 850 kilometre coastal belt of Somaliland, of commercial quality and quantity (Bertolli, 2000) and international petroleum companies, prior to the war, reportedly identified oil deposits in Sool, Saaxil and Awdal regions. The Somaliland government is currently investigating the feasibility of developing some of these sites.

⁷ A camel load is about 125 kg⁷.

⁸ Progressive Interventions (PI), an international NGO, has developed a guide for launching such business ventures.

Trade and Commerce

Between 1993 and 1998, the volume of trade in Somaliland increased dramatically, surpassing pre-war levels. This increase has been based on the growth in livestock exports and the opening of Ethiopia-Somaliland border, which has created a vast new market for Somaliland. Through the years of 1996-1999 some 65% of the trade through Berbera port was reportedly destined for Ethiopia (Bradbury 1997; UNDP & UNHCR, 1999)⁹. In the absence of formal economic institutions and regulations, traders respond flexibly to local demand, importing a range of basic goods, including food (sugar, rice, flour, pasta), building materials, *bagaash* (bundles of consumer goods such as sandals, cigarettes, clothes), spare parts, fuel, tyres, and electronic items and vehicles (UNDP, 1998). The international community has noted the utility of Somaliland's transshipment route to Ethiopia, which has become known as the 'Berbera Corridor'. In early 1999 the European Commission began to route food aid shipments for emergency food reserves and refugee camps in eastern Ethiopia through Berbera port. This transit operation was discontinued in 2002, since Ethiopia produced enough food to meet its own domestic needs. Since 1998, the imposition of a ban by Gulf States on livestock imports from the Horn of Africa region has seriously reduced the volume of Somaliland's trade¹⁰.

The Service Sector

Somaliland's service sector has experienced rapid growth in the post-war period. Telecommunication, airlines business and financial transfer companies have emerged to fill the vacuum left by the collapse of the former government. The expansion of these services has created a new labour market¹¹ requiring skilled professionals, as well as semi-skilled and unskilled workers.

In 2001, five telecommunication companies provide services throughout the country. In 1994 the first telecommunications companies only provided international connections to the main urban centres. Today they have expanded to small towns and also provide domestic services, linking Somaliland residents across the country to the Somali diaspora, whose financial remittances are a major source of income.

Financial remittances from Somalilanders living overseas provide a significant source of income and hard currency for the Somaliland economy. There is no reliable information about the actual volume of remittances, but most estimates are in the region of US\$200

⁹ Berbera port statistics cannot yet differentiate what is in transit and what is for Somaliland.

¹⁰ Both livestock exports and cereal imports decreased significantly. An increase in building material imports is one of the few exceptions to the global trend.

¹¹ Though non-of these is labour intensive, these companies particularly Dahab Shiil money transfer have branches at village level employing one or two people.

million per year (WSP/SCPD, 1999). *Xawalaad* (remittance companies) facilitate the delivery of remittances from the Somaliland diaspora all over the world to their relatives and business partners in all parts of Somaliland. Some *xawalaad* also provide basic banking services to the people of Somaliland and international agencies operating in the country.

There has also been a vital growth in air transport. Locally owned airlines connect all main towns in Somaliland to parts of Somalia, Djibouti, Saudi Arabia, Dubai, Addis Ababa and Nairobi. One carrier (Daallo) has begun flights to Europe. Some international carriers, such as Ethiopian Airlines and Regional Air, have also started to offer flights to Somaliland's capital Hargeysa.¹²

Industry

Investment in light industry has increased in recent years, but still remains at a modest level. For example, Somaliland entrepreneurs have established processing plants for chilled meat in Burco, mineral water and flour in Hargeysa, and a fishing canning factory in Laasqoray.

Characteristics of the Private Sector

A few prominent businessmen dominate the Somaliland economy, monopolizing much of the trade in livestock, food and construction materials as well as the clearance, retail, wholesale and transportation services, leaving no room for smaller traders and merchants. Middle-level traders dominate the trade in consumables, mainly from the UAE.

Many of these retail businesses are either individually owned or family owned enterprises, in which the proprietor owns or purchases the materials and capital equipment used in the operation of the business and personally services its operation. The problem with such businesses is that they do not generate enough capital to grown into large-scale enterprises or provide employment opportunities beyond family members - with the exception of the telecommunication, money transfers and airline sectors. In addition, the sector appears to lack the ability to initiate original business ideas. The general practice is one of imitation, so that many similar enterprises are found in close proximity or provide parallel services to the same area. Obvious examples of this tendency are the telecommunications sector, power generation and remittances companies that operate in the same cities or neighbourhoods, often in direct competition with one another. Their unrestrained competition constrains them from developing regulatory mechanisms or associations for the sharing of facilities, creation of joint ventures or, in the case of the remittance companies, to establishment of formal banking services. Despite the proliferation of telecommunications companies, most are incompatible with one another.

¹² Regional Air, a Kenyan affiliate of British Airways, suspended services in August 2001 and had not resumed flights as of July 2002.

Private Sector Constraints and Opportunities

While post-war Somaliland has witnessed substantial growth in the private sector, it has nevertheless been constrained by a number of factors:

- The absence of commercial banks and credit institutions that could provide capital and credit for business expansion or survival in difficult times.
- Inadequate infrastructure¹³- roads, ports and power supply - that would allow trade and commerce to thrive.
- Lack of effective government policies and regulation in terms of:
 - foreign investment, company and partnership laws to protect property rights, contracts and investment;
 - policies and laws that protect small industries from foreign competition;
 - policies and laws that regulate domestic business activities and eliminates or minimizes unproductive competition, monopolies and cartels, and the irrational and inefficient proliferation of small business and service providers;
 - policies on quality control and consumer protection.
- Lack of skilled workers.
- Lack of foreign investment and limited market opportunities.
- Lack of investment laws
- Lack of formal development assistance

At the same time the private sector in Somaliland offers ample opportunities. These include:

- Transit trade to landlocked Ethiopia.
- The construction sector.
- Growing demand for new services, such airlines, remittance companies, telephones and power.
- The development of light industries as a route to economic diversification.

¹³ The organisations that normally support this sector (World Bank, International Monetary Fund) are not present in Somaliland and will not provide financial services in the absence of a recognized government.

- Increased fish consumption in urban centres, providing opportunities for growth in the fishing sector.
- Re-activation of cement production

3

The Nomadic Pastoral Production System

Somali pastoral society, with its clan-based political culture and devotion to Islam, has survived recurrent droughts and man-made calamities relatively intact. The current situation in Somaliland's pastoral environment, however, must be understood in terms of the changes that have taken place in the pastoral production system over the last one hundred years.

Historically, free-foraging livestock production was the dominant land use system and Somali pastoralism was characterized by high degree of mobility of herds and households. In the words of a Burco elder:

“We used to sing to the camels when they were browsing - *Gasbi ma qabtide gar walba u gudub* (‘to satisfy your appetite move to wherever there is pasture’). Camels owned in the heartland of Somaliland would go grazing as far as across the border at Jigjiga and Laascaanood.”

The traditional pastoral herd consisted of goats and sheep (shoats) and camels. The precise composition of a family herd reflected both the characteristics of the local rangeland environment and the production targets of the pastoralists. Camels and goats in particular are better adapted to the harsh conditions of the nomadic environment than cattle and sheep. The different species have the ability to withstand the harsh conditions of the region and nomadic pastoralism works to maximize the marginal opportunities offered by scarce pasture and erratic rainfall. In the past, the seasons imposed specific patterns of grazing on the communal rangelands. For example, in the wet season lush pasture allowed the livestock to forage over wide areas, while the dry season restricted grazing to the vicinities of permanent water points. Shoats (sheep and goats) and camels were not grazed at the same place. Camels, which can stay without water for long periods, were sent to far places to graze. Shoats, and some milk and burden camels, grazed closer to the household or the nomadic hamlet, where the wife, her daughters and those male children who were not yet strong enough to go out with the camels, stayed. The husband typically commuted between the camel camp and the nomadic hamlet.

Herding and caring for livestock was considered arduous work and imposed upon the family a division of labour. Each household member had specific task to perform. Children attended to the sheep and goats and women milked them. Unmarried young men (known as *geeljire* or ‘camel boys’) attended to the camels. Men were responsible for fencing the nomadic hamlet, acting as *saban* (scouts) for fresh pasture, watering animals from the deep dry season wells and providing leadership and protection for the household.

The pastoral lifestyle was modest. Animal by-products of milk, ghee and meat were produced for subsistence purposes and only occasionally non-pastoral foodstuffs were eaten. Tools, cooking utensils, materials for the nomadic hut were all home made. Ideally two or

three camels were sufficient for the transport of the nuclear family, the hut and all its effects. An old man recalls this austere life:

“As children we went out looking after the herds in the morning and never returned for lunch because we used to eat various kinds of wild fruits, seeds, and gums that are now extinct, which were nutritious. Some of them were eaten to quench the thirst.”

The primary production targets of pastoralist families involved maximising the use of subsistence products (milk, meat, skins, work), meeting social obligations (e.g. paying bride price (*yarad*) and blood compensation (*diya*)) and providing insurance against disasters such as droughts, epidemics or raids. The latter was achieved by building up a large herd in good years (Schwartz, 1993).

In the past, diverse species of grasses, shrubs and wild game populated the rangelands. In the dry season, pastoralists migrated with their livestock to dry season grazing lands close to deep wells and the waterless Hawd was abandoned as a natural reservation so that the vegetation could regenerate. One workshop participant from Oodweyne recalled:

The land was covered in abundance with such important nutritious vegetation such as *Madheed* (*Cordia monoica*), *Dhafaruur* (*Grewia tenax*), *Hobob* (*Grewia bencillities*), and *Himir* (*Grewia indigofera*), and we never had acacia here in Oodweyne.

A characteristic of nomadic pastoralists is their dedication to their animals, since the livestock both satisfies their material needs and has a cultural significance. Livestock, particularly camels, are important for status, for social transactions, and are celebrated in poetry. Pastoralists have a profound knowledge of animal husbandry, animal behavior and diseases and a sophisticated knowledge of the environment. A young poet explained:

In the summer time the camels were driven to the salty wells in the north, because it kills all the diseases they have experienced during the *gu* (spring). If the *gu* rains were not good and there was no good pasture, they did not take the camels to the wells as frequently as in an average year, because without pasture camels cannot bear the water.

Cooperation within the clan revolved around the coveted camels. These belonged to the lineage and were important for settling *diya* payment (compensation) for homicide and other injuries. There were collectively husbanded and defended by kinsmen.

Elaborate rules (*xeer*) or customary law existed to regulate the pastoralists' relationship with one other and with their environment. These rules, which served to maintain law and order, were negotiated between lineage elders, although decision-making was consensus-based. Concern for the environment was also expressed through the *xeer*, with rules that protected valuable trees (*lama garacaan* - 'those trees that cannot be cut') such as shade trees (*damalka*) and trees under which meetings took place (*gobka*).

The rangelands were traditionally managed as a common resource. But while pastoralists in principle had open access to all communal grazing lands, in practice certain wells and grazing areas were associated with particular lineages. People of other clans were only allowed to use

those wells or grazing at times of acute scarcity, when conflicts over pastoral resources were more frequent (Lewis, 1959). There was a common understanding that elders in a particular area had some authority over resource use. But this authority was usually only exercised at times of distress. This customary communal system functioned well by providing equitable access to grazing land and water, as well as clear rights and obligations for their members (Barraclough, 1995). As one elder from Oodweyne who was attending the workshop confirmed, this meant that the environment was cared for:

Each community was responsible for the well-being of its land. For example, the elders in the North section were responsible for that section and so on.

The Transformation of the Pastoral Production System

The choice of the pastoral economy as a research topic reflects a concern among many people in Somaliland at the current state of pastoral economy. There is a perception that at this point of political transition in Somaliland, various economic, social and environmental problems threaten to undermine this economy and the pastoral nomadic way of life. Some academics have for some time been concerned at what is viewed the decline of pastoralism as a way of life in the Horn of Africa (Markakis, 1994).

Demographic Growth and Wealth Accumulation

Little is known about Somali pastoralism prior to the advent of European colonization. In Somaliland the arrival of the British in the late 19th century brought profound changes, not least in establishing the basis for Somaliland's livestock export economy. It was when the British Administration returned to Somaliland after the Second World War, however, that unprecedented socio-economic changes profoundly altered Somaliland's predominately pastoral society. The transformation was apparent in changes in the system of pastoral production, in culture, patterns of consumption, life-style and the peoples' relationship to the natural environment. According to participants in the study, while pastoral environment degradation was always an environmental problem, the severity of pastoral degradation began to become pronounced in the 1950s. In other words, they attribute the origins of the crisis facing pastoralists today to the advent of modernity and the modern state.

The socio-economic changes that began after the Second World War were spearheaded by increased employment opportunities for Somalis in public service with the British Administration in Somaliland. The salaries and other benefits received by the newly employed civil servants provided opportunities for new forms of wealth accumulation. Urban administrative and trade centres developed with new public services and, as Somalis travelled, abroad a significant diaspora evolved. Despite the trend towards urbanization most of the resources were channelled back to the rural areas. Urbanised Somalis maintained links with their rural kinsmen and invested in buying herds or constructing (*berkado*) or small dams (*balliyo*).

A major source of wealth was the increased commercialisation of livestock production. Aside from the restoration of administrative functions, an immediate preoccupation of the British Administration was to revive the protectorate's pre-war economic "foundation" – the livestock trade (Samatar, 1989). The process of commercialisation was fuelled further in

1950s by the oil boom and the growth in the number of Muslims going on the Haj, creating an annual demand for meat. As the trade in livestock grew, traders invested in trucks to transport animals, water and animal fodder. The income from livestock exports was also invested in building *berkado* and *balliyo*. The development of livestock trade stimulated the expansion of towns, communications, and the import of consumer goods, such as trucks, clothes, sugar and cereals.

Another development associated with the commercialisation of livestock production and urbanization was rural out-migration. This had both a national and international dimension. Somalis began to migrate to England over a century ago, and after the prolonged drought (“*Dabadbeer*”) of 1974 in large number to the Gulf States, seeking better economic opportunities. In 1987, it is estimated that number of Somali migrant workers to be at least 375,000, the majority of the migrants were from Somaliland (Green & Jamal, 1987). Their remittances supported a powerful informal economy in 1980s and 1990s that was felt both in the cities and in the rural areas, which experienced a construction boom.

Development Policies

Both the colonial and post-colonial administrations failed to produce development policies to keep pace with the changing social, economic, political, ecological and cultural conditions affecting pastoralism. Efforts to develop the vital nomadic economy have been driven more by the interest of the state than by the needs of the herding communities. The aim was to integrated pastoralism into a market economy, which has led to the shift of the social and economic functions of pastoralism from sustaining rural livelihoods of pastoralists, to supporting a growing urban population, a mercantile class and the state (Bradbury, 1996). The few attempts to address the deteriorating conditions of the pastoral rangeland have failed.

The policy of the British Administration was to bring pastoral production under its control, but the Somali pastoralists successfully evaded their attempts (Samatar 1989). In failing, the British Government instead encouraged sedentarisation and urbanization and injected massive state resources into the development of the peasant and urban sectors of the economy. Common grazing lands were allocated for cultivation, against the wishes of the pastoralists. Extension services and other forms of technical support were provided to farmers. In the cities, schools and other services were established. All these innovations took place in the context of a predominately pastoral society, at the expense of nomadic pastoralists.

Post-colonial regimes continued the historic neglect of the pastoral sector. The development policies of the civilian administrations (1960-1969) and military regime (1969-1991) vis-à-vis the pastoral sector were remarkably similar. Their approach was to modernize food production, especially crop production, under the guidance of the central government. The primary purpose of livestock development was the intensification of market output from the pastoral sector (Samatar, 1989). In the process, grazing reserve areas were developed as holding grounds for export animals and rangelands were increasingly privatised.

In 1975 the military introduced a new land tenure law. This effectively nationalized the common rangelands and led to increased privatisation and nullification of customary treaties

between pastoralists over rangeland management (Bradbury, 1996). Though the law made private ownership of rangelands illegal, private enclosures for cooperative ranching were allowed (Bradbury, 1996). Thousands of square kilometres of formerly public rangeland came under private control. Around Ceerigaabo, for example, some 3,000 square kilometres of common range was privatised (Prior, 1994).

These development policies further incorporated pastoralists into the national economy, without consideration for ecological factors. The net result was the marginalisation of pastoralists, both politically and economically, and continued environmental degradation.

War

War has had a profound impact on the pastoral environment. Since the Ogaden war of 1977-8, Somalia and Somaliland have been theatres of internal conflicts. The decade-long armed struggle by the SNM followed soon after the Ogaden war and, since reclaiming its independence in 1991, Somaliland has experienced two rounds of civil war.

The human cost of these wars has been immense. All of them have produced mass displacements of people, internally and across borders. The livelihoods of rural people have been seriously affected, although less so than townspeople, and stress on the pastoral environment and traditional social support structures has increased. Refugee camps were created on either side of the Somaliland-Ethiopia and Somaliland-Djibouti borders. In Somaliland 12 refugee camps were distributed in the Hargeysa-Boraame corridor (Samatar, 1991). There has not been any study quantifying the impact of these camps on the environment or the area affected. Nevertheless, these 12 camps exacerbated environmental degradation, as a five kilometre¹⁴ radius land was cleared around each camp, roads built and trees and grasses cut for construction, fencing and firewood.

Basic infrastructure, administration and services in pastoral areas were extremely limited prior to the Somali civil war. State investment consisted of a few environment protection programs and the salaries of rangers and forestry officers to guard the grazing and forest reserves. The limited infrastructure, administration and services were either destroyed or disrupted by the conflict, leading to a breakdown of local resource management apparatus, further aggravating the stress on the pastoral environment. As sources of public service employment collapsed, some people turned to charcoal and fodder production as alternative sources of income. One charcoal producer explained in a workshop:

As charcoal burners we burn all kind of trees live or dead. We began with the dead wood, but finish with them. We know we are damaging the land and creating rain shortages. We are unemployed and we consume much *qaad*, this has led us to do anything to meet our basic needs regardless of the consequences.

¹⁴ According to the observations of some working group members.

Pressures on the Pastoral Environment

It is difficult to clearly pinpoint the exact causes and effects of the changes taking place in the pastoral environment, given the complexity and inter-linked nature of the variables involved. The pressures on the pastoral environment are the result of a complex interaction between biophysical¹⁵ or ecological, socio-economic, cultural and political factors. To understand the nature of the changes taking place one needs to comprehend the links between these factors. This chapter highlights the relationship between the wider environmental crisis and the current economical, political and social changes affecting pastoralism, by synthesizing information gathered from workshop and Working Group discussions, available documentation and interviews.

The quality and accessibility of rangelands and water are critical factors underpinning the sustainability of pastoralism and the pastoral economy. Today, the fragile ecosystem of the pastoral environment is under pressure. The quantity and quality of pasture has declined and environmental pressures have restricted the mobility of pastoral nomads, disrupting the age-old strategy by which livestock and herdsman migrated between wet season and dry season encampments. The capacity of Somaliland's ecosystem to support nomadic pastoralism at present levels may soon be over-stretched, if it has not already been surpassed.

This section identifies the numerous factors that are putting pressure on the pastoral environment and are effecting livestock production. Workshop participants consistently identified five as being most critical:

- Cyclical drought
- Increased water points, human settlement and transport
- Charcoal production
- Private enclosures
- Increases in the livestock and human population

Cyclical drought

In Somaliland drought is a recurrent phenomenon and is considered one of the main environmental pressures on the livestock economy. Between 1911 and 1974 there were eight prolonged periods of drought in Somaliland (1911, 1914, 1918, 1927-28, 1933-1934, 1945-47, 1950-51, 1959) (Bothman, 1975). Since then, there has not been any documentation on the number of droughts that took place. But the countries did experience prolong droughts in the seventies, eighties and nineties, with an exception of 1974-5 droughts non of them led to people encampment.

¹⁵ Climate, relief, soil, hydrology, vegetation, fauna etc.

The consequences of a prolonged drought can be devastating. A lack of rainfall reduces the vegetation cover and bio-diversity of the land, which can lead to a loss of livestock from starvation or water stress. Droughts can trigger food shortages, the forced liquidation of livestock at depressed prices, migration to urban centres or camps, and the loss of human life from starvation or social conflict. On the other hand, some experts argue that droughts help to keep livestock growth in check, by enforcing the balance between range capacity and livestock numbers.

Most theories of environmental change are based on two broad schools of ecological thought, which are “equilibrium” and “non-equilibrium” principles (Lind, Kitevu, Huggins, and Nyukuri, undated). The “equilibrium” ecology principle is based on the premise that the environment is an inherently inflexible ecosystem (Sullivan 1996). Any environmental change, therefore, is viewed as an abnormal disturbance to the system, rather than an integral part of the system. For example, excessive livestock numbers can lead to degradation, and there is therefore a need to regulate their numbers to maintain the “equilibrium” of the ecological system.

The “non-equilibrium” ecological principle stresses that ecological characteristic or environmental changes are the result of dynamic interactions between many factors (physical and non-physical) whose certainty is not always predictable (Lind, Kitevu, Huggins, and Nyukuri, undated). Physical factors in the environment, such as drought or rainfall variability, for example, will have a greater impact on plant growth than any marginal fluctuations in the stocking rates of livestock (Benke and Scoones 1993). In the pastoral areas of the North Rift Valley in Kenya, it has been noticed that plant growth will respond more to climatic fluctuations more than adjustments made to stocking rates (Ellis and Swift 1988). So according to ‘non-equilibrium’ principles, environmental change is a normal function of a dynamic ecosystem (Lind et al, undated).

In the risk-prone environment of Somaliland, pastoralists have developed strategies to ameliorate the impact of rainfall failure. Hiring trucks to transport water and grass to drought affected-flocks areas and building *berkado* to harvest rainwater are two such strategies. There is some evidence, however, that their coping capacities have been weakened by various factors, such as private enclosures, and increased water points. In order to soften the socio-economic impact of drought on pastoralists and to enhance their coping capacity, organizations and preparedness plans should be established to predict and respond to droughts.

Water points, human settlement and transport

The availability of sufficient water has been an eternal problem for the Somali nomads, whose movement is determined by the location of water source and pasture. Modern development strategies that have introduced mechanized boreholes, wells and *berkado* to mitigate the problem of water availability have impacted on the environment.

The first *berkado* to harvest rainwater were introduced in the dry Hawd zone in 1950s. There was steady growth in their number in 1960s and sharp increase in 1970s following the drought of 1974 (Sugule & Walker, 1998). Although many were destroyed during the war,

berkado construction was reinvigorated after 1991 as people returned to the country. Even in the regions like Sanaag, where they were previously uncommon, *berkado* are now widespread.

Due to lack of regulation, water points - mainly *berkado* - are increasing and the distance between them is diminishing. There is no reliable estimate on the number or density of *berkado* in Somaliland, but in a given district their number may vary from less than 10 to more than one thousand. The concentration is most acute in Hargeysa and Togdheer regions. In 1998 there were estimated to be 3,335 *berkado* in Hargeysa region alone excluding the district of Gabilay (Swiss Group 1998), and in 2001 as many as 11,500 in Togdheer (FSAU, 2001)¹⁶. Before the introduction of *Berkado* in the early fifties, there were only three water points in the Hawd area of Togdheer - in Caynabo, Burco and Walwaal - and only in Hargeysa and Bulaalle and in the region of Hargeysa.

Sedentarisation has increased in parallel with the proliferation of *berkado* as people have settled around them. Again the concentration is most acute in Togdheer and around Hargeysa. In Togdheer there are 120 permanent settlements, with forty-two in Oodweyne District in the Hawd, before the introduction of *Berkado* in early fifties the only known settlement were Burco, Ceek, Ceel Xumey, Harada, Oodwayne, and Caynabo. In southeast Hargeysa there are 42 villages.

In a land where ground water can be 500-600 meters deep, *berkado* is the prime source of water for both animals and the inhabitants of dry nomadic areas. They provide a reliable supply of water to the people and the livestock during the dry seasons, while the surplus water can be also sold for profit. They maximize rainfall harvesting, control run-off and relieve pressure on groundwater. The commercialisation of livestock production, and the possibilities of lucrative cultivation of *qaad* perhaps also stimulate the development of *berkado*. While some argue that the *berkado* accelerates the process of rangeland degradation, others argue that the multiplication of *berkado* ensures the wide distribution of the human and livestock population and prevents the concentration of people and animals around a few water points during the dry season (WSP, 2001).

Another development associated with the increase in water points and settlements is the growing use of vehicles, which has significantly improved the pastoral mobility and their access to urban services and goods. Trucks and cars crisscross these plains, carrying livestock, charcoal, milk, *qaad*, goods, and water, leaving tyre tracks that can turn into deep gullies. And the problem that is most acute in southern grazing lands of the Hawd and in Sool region.

Striking the right balance between improving nomads' access to water, while averting the negative environmental consequences will remain a challenge for people in Somaliland. The development of an effective water policy will be a critical first step in regulating the spread of

¹⁶ According to Wisner (1994), Burco region in 1970 had 18,000 *Berkado*. But it is not clear whether it is Burco of 1970 that included Sool and Sanaag regions, as Sool and Sanaag were part of North East region (Burco) in 1970.

water points and settlements in the rangelands, consolidating the existing ones, removing unnecessary ones, and introducing a minimum distance between those that remain. Policies are also needed to address the environmental impacts of roads. Road drainage can be improved so that rainwater can be more effectively harvested for livestock or for crop or fodder production.

Charcoal production

The production of charcoal and firewood is a major environmental concern. Fuelwood and charcoal are the main sources of energy for Somaliland and as the population and settlements have grown, the demand for forest products has increased. Charcoal production has greatly increased since the collapse of the last government in 1991 as a result of export demand and increased urban consumption, due to returning refugees and out-migration from the rural areas. In Somaliland today, an estimated 8 million trees are cut annually for charcoal production (IUCN, 1997). *Acacia Bussei*, a slow growing species locally known as *quruc*, is the preferred tree for charcoal. A large *quruc* tree can produce three sacks of charcoal. In one hectare, there are an estimated 65 *quruc* trees. The overexploitation of this tree will eventually deplete reserves, because regrowth is slow. This will eventually result in an energy shortages and higher energy prices (IUCN). According to one veterinarian, some 94 square kilometres of forest are being deforested each year. He noted:

Households in Hargeysa and other urban centres depend on charcoal for their cooking. In 1996, 80 tons (13 lorries) of charcoal came to Hargeysa each day: the equivalent of roughly 29,200 tons per year (Herzog 1996). In 2000 charcoal consumption in the whole of Somaliland was estimated to be 480,000 ton per year, based on an estimate of 300,000 families using an average of 2 bags (15 kg each) per week (Bertolli, 2000). There are numerous production sites in each region and their production capacity varies. In August 1999, Noolays Charcoal Cooperative of Hargeysa Region had about 95 production sites, with an average production capacity of 1,000-1,500 sacks of charcoal per site. Throughout the country the production capacities of the sites are in decline, as dry firewood is being depleted and green trees are being used.

Charcoal production in most regions is mainly for local consumption. However, in Eastern Sanaag and parts of Sool in the post-war period, it has mainly been produced for export to the Gulf States. This peaked during the livestock ban of 1997 and 1998, with over 2 million 25 kg sacks exported (500,000 metric tons). Charcoal production in these regions virtually stopped in late 1998, as exports from Kismaayo and Muqdisho with better quality charcoal increased.

In an effort to improve charcoal production and the efficiency of wood-fuel use, the IUCN (International Union for the Conservation of Nature) initiated two programmes in 1999. One, related to charcoal production, proved not to be cost-effective and was abandoned. In the other, IUCN worked with local artisans to develop fuel-efficient stoves that were sold for US\$ 5 each. Although the new stove is more efficient according to all users, it is less durable than conventional stoves. The production of these stoves still continues, but at a rate too low to have a major impact on charcoal consumption.

Recognizing the negative environmental impact of charcoal production, the Somaliland government has banned the export of charcoal to the Gulf States.

Enclosures and the privatisation of rangeland

The enclosure of rangeland is another critical environmental preoccupation of Somaliland pastoralists. Enclosures represent the de facto privatisation of communal grazing land and as such are a point of contention between pastoralists and the enclosure owners. The practice is not new, but it is a rapidly increasing trend. Enclosure owners illegally grab a portion of communal land, sometimes as large as 5 to 10 square kilometres, in their home (clan) territory which they then prevent others from using. Commenting on an area where the practice is especially intense, one workshop participant said:

You don't see enclosures in the Laascanood area, but the enclosure fencing begins from the Oog (Togdheer region) stretching all the way to Hargeysa. In our district Oodweyne, only a very few of us possess these enclosures, which stretch for miles and miles, leaving the majority without land.

While the enclosures of the rangelands reduce communal access to the primary productive base, there are some benefits associated with the practice. Enclosures serve both as grazing reserves and as source of fodder for export animals. Enclosure owners protect this land from indiscriminate use, and some of them have invested in water control and catchment systems.

Somaliland is faced with a predicament. The livestock trade cannot progress without the fodder from the enclosures and the traditional pastoral system cannot survive and expand when pastoralists are denied access to large junk of grazing land. A formula that solves this dilemma is needed, ensuring access to pasture for livestock have while allowing space for fodder production. A mechanism is also needed to evaluate the existing enclosures, eradicating those with a harmful environmental impact and preventing further illegal enclosures. However, whatever the solution, it is certain that Somaliland cannot revert to free-ranging nomadic pastoral system.

Increases in livestock numbers

Over the past 60 years an expansion in human and livestock population has been exerting pressure on the pastoral environment. There is no exact data on the size of the herd in Somaliland. Extrapolating from the 1975 Somalia census of livestock, the following annual growth rates are assumed for Somaliland: goat 2.4%, sheep 1.7%, cattle and camels 1.1% (Somaliland Ministry of Planning, 1999). Based on this Table 1.1 presents the total estimated livestock population from 1996 to 2000. For the year 2000, this is estimated to be 25,136,025 heads.

Table 1.1 Estimated number of livestock in Somaliland

Year	Goat	Sheep	Camel	Cattle	Total
1996	9,958,691	5,386,468	5,336,540	2,736,687	23,418,368

1997	10,197,699	5,478,038	5,395,242	2,766,791	23,837,770
1998	10,442,443	5,571,165	5,454,590	2,787,226	24,255,424
1999	10,693,062	5,665,875	5,514,591	2,817,886	24,691,414
2000	10,949,695	5,762,195	5,575,252	2,848,883	25,136,025

Source: [Extrapolation from Somalia Ministry of Livestock (Department of Statistics & Research), 1975]

However, the above annual rates of increase are based on the 1975 census and don't take into consideration the deaths and the losses due droughts and other calamities that occurred in later years. For example, in 1999 as result of rain failure for three successive raining seasons in the west of Hargeysa, almost 70% of cattle in that areas have died¹⁷. Similarly, about 60% of cattle and 35% of sheep in Sanaag region were loss in between 2001 and 2002¹⁸. What is more camels as browsing animal has moved from Somaliland regions to other Somali regions particularly Zone five of Ethiopia, as tall trees were cut down.

Citing their own observations, most participants in the study believe that there has not been an increase in any of the four domestic species - sheep, goat, camels and cattle – since 1991. Besides, they contend that Somaliland's rangelands are unlikely to be able to support the kind of figures projected by the Ministry When 25.1 million heads of livestock is converted into Tropical Livestock Unit (TLU)¹⁹ it becomes 10.6 million TLU; TLU annually requires about 2.25 tons of fodder (Axmed, 1988). Therefore, 10.6 million TLU needs annually about 23.85 million ton of fodder. The estimated fodder production of Somalia and Somaliland combined in 1986 was 13.7 million tons (Axmed, 1988), equivalent to only 6 million TLU, excluding the needs of donkeys, horses, and wildlife. In other words, Somaliland's rangeland capacity is far below the level required to support the Ministry's estimates.

Nevertheless, some regions have been experiencing an increase in livestock numbers. One participant cited the growth of his own family's herd as proof of growing livestock numbers in his region: "Before we had three *xero* (kraal) and now we own 13 *xero* of adhi (shoats)". An officer of the FASU (Food Security Assessment Unit), who has undertaken studies and assessments over the past decade on the Togdheer, Sool and Sanaag regions explained that trends in livestock population growth (and decline) are not the same across Somaliland:

Today livestock are increasing in some regions like Sanaag and decreasing in some places like the Hawd. Livestock are increasing along with the growth of the population in some places, and in some places like Hawd the population is

¹⁷ Based on field interviews conducted by the principal researcher , 1999

¹⁸ According to an informal survey conducted by an FSAU officer in that region

¹⁹ One Tropical Unit is equal to 250 Kg. Converting rate Camels 1.2, Sheep/Goat 0.1 and Cattle 0.8

increasing while numbers of livestock are decreasing. Whoever says that livestock is increasing or would increase in the Hawd is dreaming. In reality, total livestock population may have increased due to population expansion in some regions, but ownership per household has declined over the years.

The disparity in livestock growth across Somaliland is attributed by some people to the area of grazing available for the animals.²⁰ According to some informants and workshop participants, animals in Sanaag region and Sool have more space for grazing when compared to Togdheer and Hargeysa regions. It is widely believed that the Hawd may have already reached the limit of its capacity to support more animals, and that the current trends, without urgent intervention, could spell environmental disaster. As one participant complained:

One can see in some of the grazing plains of Sanaag, a thousand sheep or goats owned by one family grazing alone in some of these plains, whereas in the Oodweyne area [in the Hawd], wherever you go, you will find berkado, villages, enclosures and people, so no space for animals.

There is no reliable demographic data on Somaliland. But Somaliland's population has been steadily increasing since 1991, due to the combined effects of the returning population from southern Somalia, from refugee camps in Ethiopia, and a high fertility rate.

The Impact of Environmental Change

Quantitative data on the extent of the impact of these changes on Somaliland's pastoral environment is lacking. National concern about environmental change in the pastoral rangeland has arisen, not from comprehensive studies or analysis, but rather from anecdotal evidence and disconnected studies of specific problems. However, the first-hand observations of community elders and concerned professionals who participated in WSP work provide substantive evidence of the impact of the changes taking place. These include rangeland degradation, the disturbance of grazing patterns, and the weakening of traditional social structures and coping mechanisms.

Rangeland Degradation

The pastoral habitat has been changing since the advent of colonialism in the 19th century, when pastoralists were drawn into the market economy. The scale of change was relatively small until the 1940s. While rangeland degradation was evident, concern about rangeland degradation as a problem emerged in early forties. Edward (1942) and Glover²¹ carried out surveys before and after the end Second World War respectively to assess the problem and both came to the conclusion that overstocking was behind the degradation. In 1967 the Food and Agriculture Organisation (FAO) warned about the degree of range deterioration

²⁰ FAO/FSAU workshop, Hargeisa, November 22-23, 2000.

²¹ No proper citation is available to this author for the Glover Report.

and its catastrophic consequences in case of major drought (Hartley, 1967). Ayan 1990 has also pointed to rangeland degradation in 1980s and 1970s, due to mainly overgrazing. A survey by the World Bank in 1987 reported that the 'northern rangelands' (Somaliland) were the most seriously degraded because of their steeper topography, their proximity to major ports and a trend of declining annual rainfall (Ayan, 1990).

Environmental degradation can be observed in the changes in rangeland vegetation, among perennial grasses and annuals, the increase in wind and water erosion, the encroachment of sand dunes due to the removal of stabilizing vegetation, a loss of productive topsoil and the proliferation of plant species of little economic value. The last include thorny, inedible species like *tiin*, *garanmaa*, *keligii noole*, which have multiplied where more lush, nutritious pasture once grew.

Despite the lack of empirical data, environmental degradation leads to a reduction in rangeland productivity, which affects livestock productivity, and which in turn threatens the food security of pastoralists. The structure of herds changes and their size per household decreases. The animals produce less milk, affecting the nutrition of pastoral household. As result both people and animals become more disease prone. Rural poverty increases, along with vulnerability to drought. Out-migration increases, leading to social tensions and shortages of livestock products on the market.

In addition to erratic rainfall and recurrent drought, one of the main causes of land degradation is thought to be overgrazing. Defined as the 'continuous grazing' of rangelands (Payne, 1982), overgrazing means that grasses are eaten before they become seedlings or flower. Large increases in livestock numbers are normally considered to be the driving force behind the overgrazing. The impact of overgrazing is most severe around water points, settlements and enclosures, where the intensity of land use has increased.

The increased availability of water due to the construction of berkado around permanent settlements encourages cattle rearing and opportunistic farming in marginal lands. In some places cattle and donkeys have replaced camel herding and the use of camel as a mean of transport. Pastoralists participating in the workshops regard browsing cattle and donkeys as more damaging to the rangeland than camels, goats and sheep, because cattle and donkeys uproot or dislodge the grass with their hoofs.

Long-term consequences of deforestation include rainfall shortages and rising temperatures. Many workshop participants attributed the shortages of rainfall facing the country to the relentless deforestation.

Environmental degradation is also linked to the commercialisation of the pastoral economy, as it has led to an increase in the use of trucks in pastoral areas. Trucks are used for watering their animals, moving animals to the richer pastures and for transporting milk to be sold in the towns. The tyre tracks made by these trucks lead to excessive water run off and gully erosion on the rangeland.

Poverty and rangeland degradation are also interrelated. The commercialisation of water, together with the multiplication of berkado and pasture with private enclosures, and the use of technology such as radios and trucks for animal husbandry are also causing social

stratification among pastoralists. The poorer (or less well-connected) pastoralists are often deprived of the best natural grazing land and forced onto less productive marginal land. This may result in overstocking and overgrazing of these areas (Janzen, 1991). Out of necessity poorer pastoralists are forced to overexploit the environment to meet short-term needs, sacrificing long term environmental sustainability.

Changes in Grazing Patterns and Coping Mechanisms

Nomadic pastoralism in Somaliland is characterized by seasonal migration between wet and dry season pasture and water sources. The mobility of households and herds is a distinctive adaptation to this risk prone environment. Restrictions on mobility affect livestock nutrition and production, rangeland ecology and inter-group relations.

Beginning with the colonial period, the creation of permanent water points in arid zones such as Hawd has altered grazing patterns and cyclical migrations. Waterless areas that previously could be grazed only during the wet season could be grazed all year round. Migrations became more localized and the range was given little time to regenerate. The availability of water meant that animals could be watered more frequently, and did not need to move far from the water points. According to one pastoralist who spoke in one workshop:

In the dry season (*jiilaa*) the sheep and goats used to drink at intervals of 12 days and everyone knew how to make a 100 barrels of water for his household last for three months. Nowadays we are consuming a whole *berkad* because the interval has been reduced to four days. Moreover, everyone knew the consumption per head. For example 40 heads of sheep and goats consumed 1 barrel of water and they used to drink the water when they needed.

The development of permanent water points has encouraged sedentarisation. Together with growing use of enclosures, this trend has put tremendous pressure on traditional grazing patterns. Enclosures, which were first encouraged by the colonial administration, are a major concern to pastoralists. Private traders and fodder producers are fencing large areas of grazing land reducing access to pasture and obstructing the seasonal movement of livestock. Pastoralists during migration (*bayaan*) may even find it difficult to find space for a one-night encampment (*meel ay ku dhaxaan*). In the *Qadow* area south of Gabiley, enclosures now prevent the movement of pastoralists and their herds between the Hawd/Ogo highland zone and the rich grazing grounds on the coast.

The Weakening of Social Structures

The commercialisation of pastoral production and the incorporation of this semi-subsistence mode of production into a market economy have, among other factors, contributed to the erosion of traditional social structures and the cohesion of nomadic pastoral society. Workshop participants felt that the spirit of cooperation and collective responsibility that was central to traditional animal husbandry had been lost and was being replaced by individualism, greed, mistrust and competition. They complained that local authority is being weakened and that authorities have difficulties dealing with local disputes. Throughout the country, they said, traditional leaders complain about the disorder that has descended on their communities. As a result local authorities and lineage heads are losing their influence or

control in their communities. And while the elders have lost their influence, community members have also lost regard for local authorities.

The weakening of traditional authority has impacted upon the environment in turn, by undermining the informal systems that once regulated the utilization of communal rangelands. Since anyone can establish a settlement, *berkado*, enclosure or charcoal production site without consideration of the consequences and without fear of sanctions or penalties, the traditional systems of resource management have been overwhelmed.

The social stratification that has accompanied the commercialisation of livestock production, poses a challenge to the traditional leadership and land use control. This trend is not new. Since the mid-1980s wealthy livestock owners have been able to pursue their own private economic interests without community consultation, setting up enclosures and constructing *berkado* on communal grazing land, that was previously managed on the basis of community interest and customary law (Stern, 1988a and b).

A consequence of this weakening of traditional structures is that many new villages are established on the basis “*tuulto caro*” (or envy). If two clans living together in village for some reason find it difficult to continue living together, instead of reconciling their differences, one moves and creates a new village a short distance from the old one. Another way villages and enclosures form is by “*xintan*”: that is, by emulating other clans. Many clan groups want to establish their own villages as a way to enhancing prestige or for political gain, in the hope that they will be designated as an administrative district.

These changes have also affected the roles and the relationship within the pastoral family. In the past, family herds represented a web of reciprocal rights and obligations, with clear entitlements for women and the children (UNICEF/UNSO, 1992). This does not hold true today, as men no longer appear to follow this pattern of social and economic order. Men have maintained control of the resources, without due regard for the traditional rights of women and children. But workshop participants complained that their moral authority over the family has been eroded and, as result, family organization has been thrown into disarray. The authority of the parents the traditional family working relationship is being consistently challenged. One Working Group member noted:

We are in situation in which the father is either begging his son or offering him a bundle of *qaad* to do some work for the family.

The loss of traditional knowledge and skills (of animal behaviour and rearing, range management and ethno-veterinary science) is also associated with these changes in pastoral society. The foundations of traditional knowledge are being steadily eroded by the deaths among the elderly and the out-migration of pastoralist youths who are being attracted by the city lifestyle to take unskilled jobs. One working group member shared an example of this problem with the workshop participants:

In a previous workshop on animal health in Hargeysa, a participant who was 33 years old had spent 25 years of his life in the country-side rearing animals. In conversation with him, I realized the extent of his knowledge about livestock when he told me that if livestock have pasture and water they will not get sick, because

water provides salt and dirt (*carrn*). Such knowledgeable young men are being attracted to the city. That young man is now either a construction worker, waiter or *qaad* seller.

Out-migration from rural areas certainly reduces the labour available for animal husbandry. Many of the young nomads who migrate to the urban centres included young women, who seem to enjoy better opportunities for self-employment than men (young women tend to become petty traders). While out-migration is a worrying trend for pastoralists, it can nevertheless help to relieve some of the pressures on poor rural households.

Another indication of social change is the spread of *qaad* consumption to rural areas from the cities. Pastoralists, particularly men and the youth, spend much of their time and household income on *qaad* chewing, impoverishing the family and neglecting their responsibilities to the household. One woman participant lamented: “They (men) spend most of their proceeds on *qaad*. The proceeds from charcoal production, fodder, and livestock go to *qaad*.”

The out-migration of young people to the cities, and the pre-occupation with *qaad* chewing has led to a change in gender roles, with women assuming tasks and responsibilities that used to be the domain of men. Women have therefore had to take on a disproportionate share of the burden of pastoral production. In addition to traditional chores, such as erecting and dismantling the hut, attending to the small stock and caring for the children, nomadic women have to travel to the cities to sell milk, ghee and hides to fulfil the family needs. Some women also do most of the watering of the animals.

However, while the burden on women has increased, many of the tasks that used to be performed by men, such as seeking green pasture for the animals (*saban*) or fetching water for the family (*dhaamin*), are becoming less relevant today. This is due to the reduced mobility of pastoralists. What has increased women’s burden is the changing nature of demands on the nomadic family today, the unwillingness of men to take up some of this burden, and the increased financial stresses on the family from chewing *qaad*.

The increased role of females in pastoral production has neither improved their social status nor brought greater participation in decision-making and resource ownership. The ownership of the herds remains with the men, who control their sale. Women do have access to resources to meet family needs, from the proceeds from the sales of milk, ghee, or slaughter of a female animal (*daabax*). In general, though women and children are the most vulnerable to the impact of these environmental changes. This is manifest in the changes in the diet and nutrition of rural families, where the consumption of dairy products, for example, has reduced. The nomadic diet is largely composed of milk and milk products, complemented by rice, sugar, tea and small amounts of meat. However, recent studies in the Somaliland suggest that the diet is changing, and that nomads are consuming less milk and selling more in order to purchase other, non-pastoral foods and non-food items. For this reason, many workshop participants expressed the belief that nomads are becoming less well nourished, although there is insufficient evidence to substantiate this. On the other hand, some see the changing nomadic diet as a positive development, because pastoralists can exchange half a litre of milk for two kilograms of grain, which they can feed more people.

Either way, the lack of women's participation in decision-making processes of the community is marginal. In the words of one rural woman, women neither take part in, nor bear responsibility for environmental degradation:

We have no role in what is going on and we have no say in what is happening, because we are busy finding food for our children, since our husband are unemployed. What we hear sometimes is the consequences of these problems. Men are responsible for what is happening to the environment and they have to find the solution and they have to act responsibility.

Interventions to Protect the Environment

Concern for the environment and rangeland degradation is not new. According to Muuse Cali Faruur, an expert on Somali tradition, Suldaan Diiriye and Sheekh Madar (sub-clan and religious leaders respectively) once met at Damal, in the vicinity of Hargeysa, where they agreed to prohibit tree cutting and poaching. The meeting was captured in a poem, which argued that people should respect this firm decision that trees and wildlife shouldn't be annihilated (*go'aan adkaa iyo shirkii bari la gowriir, dirta yaan la gooynin iyo ugaadh waa la geesmaray*). The year was 1870.

Responses to environmental pressures on the rangeland span three eras. In the first period, prior to independence in 1960, grazing and forest reserves were introduced. The second period, from 1960 to 1991, saw the most serious attempts to address rangeland problems, although the level of investment in the pastoral sector was limited and interventions sometimes counterproductive. The final period, from 1991, is a period in which any positive impact of previous interventions has been reversed and pressures on rangelands have intensified. In the absence of effective central government, environmental responsibilities have fallen on the local community.

The response of the British administration in the 1930s was to establish grazing reserves (Axmed, 1988). The objective of these was to increase the production of forage for grazing during the *jilaal* and to stop deterioration of the rangelands. In 1950, government legislation (Ordinance No. 14) was enacted that prohibited the transport of grass on lorries (Samater 89). This was followed in 1952 by the establishment of a Forestry Department. Some 384,000 hectares of forest reservation were instituted in that year, of which Gacan Libaax and Daallo forest reserves accounted for half (Axmed, 1988). Finally, in 1955 areas for crop production and pastoral production were demarcated in the west of the country.

After independence the Forestry Department was placed under the Ministry of Agriculture. In the early 1970s the Ministry of Livestock, Forest and Range was created and became responsible, along with other departments, for rangeland management. In 1976 the National Range Agency (NRA) was established to deal with forestry, range management and wildlife. Some of the laws enacted in this period to protect the pastoral environment included the law on Fauna and Forest in 1969 which banned the exportation of charcoal, followed by the Wildlife act of 1971, which outlawed the hunting of game and export of game hides. And in

1979 the Range Act was enacted to provide guidelines for national management of range resources (Ayan, 1990).

The first major intervention to deal specifically with the rangelands in Somaliland was the Northern Rangelands Development Project (1977-1985). The objective of the project, which took shape in the wake of the severe drought of 1973/74, was to stop rangeland deterioration by developing range reserves, establishing fodder production units and conducting formal and informal education (Ayan 1990). The project had only a limited success for various reasons, including (ibid):

- shortages of qualified staff, which delayed the implementation of the project
- lack of community participation in the early stages
- inappropriate technology
- no emphasis on environmental issues in the education syllabus
- unrealistic targets

Other criticisms levelled against the project were that it favoured non-pastoral people, giving them large private enclosures, drilling wells for them and providing them with other services not available to pastoralists. It also gave people who were close to the government, or who had political influence, the opportunity to enclose large grazing areas. One workshop participant explained:

They (non-pastoral people) were using different means (influence and political connection, bribery of public officials) to obtain these communal lands.

This mismanaged project inadvertently provided opportunities to many people who went to Muqdisho to obtain access to reservations and protected lands. According to one Parliamentarian:

In the west there existed three reservations during the British for the drought - Jirjirka, Libaax Yaleeyey and Idhinka. The three reservations that I have mentioned remained until the military government. The three were given to certain people in Muqdisho without local consultation. People in Muqdisho lobbied for these lands and obtained the ownership of these reservations. Ultimately they destroyed the reservations.

As result of the mounting pressure from the growing livestock and human population, many range reserve areas, such as Qolcad, were overrun by the local people at the height of the power of the military government. Such national policies and interventions did not take account of local ecological, social, and economic conditions.

Participants of the workshop noted that the greatest damage to the pastoral environment occurred during the governance crisis of the 1990s. The pastoral environment has been subjected to intense abuse and misuse. Interventions to protect the environment have been

limited, because local systems of pastoral resource management have broken down or have not been effectively re-established. The weak government and pastoral communities have been unable to establish effective control over rangeland resource use, in particular the proliferation of settlements, enclosures, roads, charcoal production and water points. Under the previous Somali government, there had been a requirement for an ecologically responsible distance of at least 30 kilometres between permanent water points. This rule still

exists in Somaliland, but is no longer strictly enforced. At the district or village level, local staff from the Ministry of Rural Development and Environment are hardly present and if, at all, are ill-paid and ill-equipped. As for local pastoral communities, they still maintain the belief in that only a strong government can take effective action (*“Dawlada adag uun baa wax ka qaban karta”*), and their attitude is typically that of helpless spectators rather than committed stakeholders.

Rangelands in Somalia are traditionally a common property, while livestock are individually owned. Past efforts have failed to provide incentives herders to practice conservation measures on communal rangelands. These factors were complicated by ineffective legislation, inadequate coordination of development efforts and an underdeveloped institutional base for rangelands resource management at the state level (Ayan, 1990).

Certain lessons can be drawn from the past experiences. Policy makers in Somaliland and international donors need to learn from past mistakes, seek new approaches based on more comprehensive and realistic assessment of problems and possibilities. A UNICEF/UNSO (1992) report on African pastoralists suggests that the main challenge is to address the willingness and the capacity of the different actors to change. The report asserts that, in order to avoid past mistakes, the following issues need to be taken into consideration:

- Multi-sectoral approaches
- Extending the time frame
- Wider participation, flexibility and coherence
- Improved coordination
- Setting realistic goals
- Existing Policies and Strategies

In the past, the Ministry of Rural Development and Environment addressed the problem of enclosure encroachment on grazing land, by adopting the demarcations introduced during the colonial administration and declared any enclosures beyond those illegal. Based on this approach, 1000s of Kilometres Square along the demarcation line in Woqooyi Galbeed region and some enclosures in Saaxil have been cleared. Unfortunately, in many places claimants reoccupied the reserves after public officials departed.

The Ministry has since developed various policies and strategies for the management of the environment. These are:

- Range Policy
- National Environment Action Plan and Strategy to Combat Desertification
- Environmental policy
- Conservation and Protection Act

Both the Ministry of Rural Development and Environment have jurisdiction over land tenure. So, with the help of the Pastoral Environment Network in the Horn of Africa (PENHA), a regional NGO, the two laws have been combined, but still need to be technically refined.

Some current policies and strategies are a reiteration of previous ones. The Range Policy and the Conservation and Protection Act in particular are based on pre-war approaches and do not take into the ongoing trends in land-use and population. Although the Range Policy states that it gives consideration to the prevailing changes, its classification of rangelands is based exclusively on ecological factors. Although it is a step in the right direction, like other policies and strategies it needs to be further refined.

The National Environmental Action Plan and Strategy to Combat Desertification does provide for immediate action to address existing pressures on the rangelands, by mandating the immediate creation of a steering committee composed of the line Ministries and concerned international organisations to combat rangeland degradation. The challenge is to find the means and the will to implement it.

The Ministry of Water and Mineral Resources is also developing a comprehensive water policy, with the help of UNICEF. Meanwhile, the ministry has developed a temporary policy to co-ordinate the activities of International Agencies working in rural water services. International agencies have been accused of contributing to the increase in water points throughout the country with potentially damaging consequences. Because there has been no central control over their activities, they have been able to do what they want where they want. For their part, UNICEF, UNHCHR, and Swiss Group – all key actors in the water sector - have begun to co-ordinate their activities with the ministry. UNICEF is the only agency involved in water not involved in developing surface water reservoirs.

Re-enactment of outdated policies and regulations will not help the situation and may even exacerbate it. What is required is a land use and resource management policy that takes into account the context of current demographic, and water trends as well as the ecology.

Community Action

The environmental changes described have been felt throughout Somaliland. The willingness to act against those involved in destructive activities, however, appears to be absent for various reasons. Local elders have limited means at their disposal. The complexity of the current environmental problems, and the socio-economic and political factors underlying them, makes it difficult for them to act. Furthermore, the legacy of an authoritarian regime, in which the central government, planned, conceived and implemented activities without

consulting the concerned communities has led to a dependence on outside inputs and an expectation of external help.

Nevertheless, in the absence of an effective central authority, many communities have attempted to find local solutions to the environmental crisis. Some of them act alone and some them with the help of the government. Under the leadership of elders, enclosures were cleared in north-west Hargeysa district. Near Sheekh, in Saaxil region, the community has burned enclosures with the help of the government. Other communities have barred outsiders from producing charcoal in their areas, but allow people from the community to produce it. Local officials in Oodweyne district of Togdheer region, using transport and fuel provided by the local community, have taken the initiative to clear some of the enclosures in their areas, burning more than 800 enclosures in the vicinity of Oodweyne. Local efforts, however, have generally been one-off campaigns, and once they are concluded the enclosures reappear.

Workshop participants agreed that the local community²² is the appropriate level at which to revive the pastoral resource management²³, and that pastoral communities should take the initiative to restore mechanisms of range management such as grazing reserves, instead of waiting for the government to act. They suggested that this can be done by forming voluntary associations with by-laws, such as grazing associations, forestry committees and charcoal co-operatives. Such organisations would be involved in self-regulatory environmental activities, managing the pastoral resources co-operatively and setting norms for appropriate use of natural resources. However, these arrangements would not necessarily award exclusive rights to a community over a given area.

In order to sustain or empower community initiatives, there is a need to strengthen the capacity of local communities to understand, manage and monitor their pastoral resource base and livestock production system. This requires the development of human and institutional resources and, in consultation with pastoralists, the establishment of supporting policies by the government with the help of international donors.

Towards a Sustainable Pastoral Production System

A wide range of factors are together responsible about the increasing pressures on the fragile nomadic pastoral environment. Recurrent drought, the increasing number of water points, settlements, tyre tracks, charcoal production, the expansion of enclosures, and an increase in the human population are behind the ongoing rangeland degradation. While the exact

²² “Community refers to a group of people sharing close lineage affiliation who regularly reside or frequent within one settlements and depend upon that settlement or a few neighbouring small rural settlements for their livelihood (WSP, 2000).”

²³ IUCN have initiated resource management at community level through PRA (Participatory Rural Appraisal in Somaliland, though the idea was well received, however, community could not carry on without outside involvement. There are some on-going efforts at the pastoralist level by local NGOs such as Candlelight through National Resource Management (NRM), in which people are ask to put animal dirt on road tracks to slow water run-offs.

dimensions and long-term economic and environmental costs of the problem are unclear, there is no doubt that the scale and severity is escalating. Consensus is widespread that rangeland degradation poses a very serious threat to Somaliland's long-term economic reconstruction. Over the last decade, in which the pastoral environment sustained the greatest damage, both the government and local pastoral communities have been unable to establish effective control over rangeland resource uses, particularly control over the proliferation of settlements, enclosures, tyre trucks, charcoal production, and water points.

According to many participants in this study, nomadic pastoralism in Somaliland is in a critical situation. The economic and environmental basis of transhumant animal husbandry is under threat and there is a trend towards sedentarisation. In the words of one informant:

We are moving away from full nomadism, we are not permanent settled livestock herders and we can't say we are somewhere in between. So can nomadism be sustainable, as it used to be? Are we going to move into some other form nomadism? Or it is the end of nomadism? Do we have to continue with old nomadism or do we have to come up with a new form that is sustainable?

Whatever course Somaliland society takes towards sustainable pastoral production, significant structural changes in pastoral Somaliland are inevitable. While there are no easy, quick fix solutions to these problems, it may be possible to come up with a sustainable pastoral production system that addresses this highly complex problem. The challenge will be to develop a strategic framework for sustainable rangeland resource management. This cannot be achieved at once. What is needed now, is to embark to the road to that framework by determining those areas of immediate concern and to develop realistic, rudimentary legislation and the means to enforce it.

4

The Livestock Trade

Somaliland's economic recovery owes a great deal to the livestock trade. Understanding the dynamics of this trade is essential to understanding Somaliland's post-war economy. In post-war Somaliland, a restructuring of livestock marketing has taken place in recent years, with new actors involved, changes in the sources of livestock and terms of trade. The market and the producers are also vulnerable to external forces, as is clear from the two embargoes on imports of Somali livestock, by Somaliland's main trading partners in the Gulf in 1998 and 2000. There is, therefore, a concern in Somaliland about the current state of the livestock marketing in Somaliland, at production and market level.

This section analyses of current livestock marketing system in Somaliland, identifies ways to improve livestock exports and a common approach to formulating regulatory mechanisms for the livestock market. For the purposes of this report, livestock marketing is understood to mean the entire system of transactions of livestock within Somaliland.

Livestock markets in Somaliland are places where the rural producer, the urban consumer and the exporter come together to make exchanges. But livestock markets in broad sense are of more than economic significance. They are primarily places for transactions of livestock, but also "act as platforms for cultural, social and political interaction and confrontations" (WSP,2000). Accordingly this study takes a comprehensive approach to the current livestock markets in Somaliland and examines different aspects of the livestock trade.

Post-war Restructuring of the Domestic Livestock Trade

Trading Patterns and Markets

Pastoralists tend to consume only a small proportion of their own stock and instead accumulate 'pastoral capital'. Most of the stock taken from the kraal for sale is destined for local markets, which are the nerve centres of most of the towns and villages. It is mostly male sheep, goats and camel on the hoof that are sold for export to Saudi Arabia and other Gulf States. Female livestock are not exported and instead may be sold for slaughter (dabaax) for local consumption.

More than half of Somaliland's livestock exports consist of animals trucked from the interior of Somaliland, southern Somalia and Eastern Ethiopia. A smaller number are moved on foot from local markets. In return, foodstuffs and manufactured consumer goods are transported back to the places from where the livestock originated. Saudi Arabia is Somaliland's main external market for sheep goats and camels, although in 1998 and again in 2000 all livestock imports from Somalia were banned on health grounds. Most of the cattle exported comes from Ethiopia and is destined mainly for Yemen and sometimes Dubai.

The major livestock markets in Somaliland are Burco-Yirowe, Hargeysa and Togwajaale. These handle livestock from all the corners of the Somali territories, and they are amongst

the largest livestock markets in the Horn. They offer better deals relative to other markets, and over the past ten years have handled record levels of livestock for export. In one day at Burco-Yiroowe, as many as 10,000 heads of sheep and goats may be sold for export (WSP/SCPD, 1999). The export 'triangle' market of Burco-Berbera-Hargeysa is well organized and relatively efficient, handling the purchasing and transport of livestock and the redistribution of imported foodstuffs and consumer goods.

There is substantial price differential (either in cash or in kind) between live animals sold in Burco and other markets to the east of Burco. Therefore, many small traders bring animals from place near other markets such as Bosaaso to Burco, seeking better deals. The higher cost of driving livestock over long distance is compensated for by the better prices found in Burco.

At the local markets those animals that have not been purchased by the agent of a particular export merchant are usually sold in the market. The seller and purchaser clasp each other's hands beneath an *cimaamad* (small white turban) and silently bargain through finger movements, the position of the fingers representing offers and counter-offers until a deal is struck (Drysdale, 2000). The final transaction is made in cash, in kind, or sometimes half-and-half, to be collected in the afternoon at the dealer's main warehouse.

Over the years, nomads have developed consumption patterns that have affected the patterns of livestock trade. Traditionally animals of three or four years of age were traded in the local markets. Today goats and sheep of all ages, from one year and half to two years, are sold in the local markets for export.²⁴ This is done just to keep pace with the pastoralists growing demand for non-pastoral products.

Livestock Traders

Livestock marketing in Somaliland has gone through important changes since the early nineteenth century. Until the collapse of the last regime, livestock marketing was based on an arrangement known as the 'merchant-*jeeble*' system (Samater, Salisbury, Bascom, 1988). This involved a *jeeble*²⁵ (middleman) purchasing animals from remote areas, trucking them to the major local markets and selling them for a profit to export merchants. Since the war, new developments in the livestock trade have weakened this old arrangement. A new breed of large export-import merchant has emerged to dominate the market. In 1997, one merchant was reportedly responsible for exporting some 60% of the livestock.²⁶ These traders have had a greater impact on local livestock marketing practices than their pre-war predecessors. Pre-war, their activities were confined to exportation and they mostly purchased the

²⁴ Smaller camels are preferred in Saudi Arabia's markets for tenderness, but for sheep and goats there has not been much change.

²⁵ *Jeeble* describes those who sell cigarettes, but here it means a middle person with limited capital who buys animals directly from nomads in small rural markets and transports animals to the major livestock markets.

²⁶ Ministry of Finance, personal communication.

livestock from the main local markets. At the same time, commodity importers were not involved in livestock trading. Since the war, the major livestock traders have also become commodity importers and wholesale retailers. This gives them control over the supply of food to Somaliland and their presence, therefore, is felt throughout the entire livestock marketing system, from pastoral areas to the point of export. In the words of middle-level livestock trader in Burco: “Everywhere their foodstuffs and livestock heads are being exchanged.”

In recent years, the merchant-*jeeble* system has been gradually replaced by the merchant-*wakiil* system, in which a *wakiil* (or agent) for a major livestock trader purchases animals from the hinterland. In this new arrangement, the *wakiil* receives as salary and a commission from the trader. This provides more direct contact between the trader and the producer and has reduced the participation of middlemen in livestock transactions. The traders have an extensive network of agents throughout the country, as well as in Somalia and Ethiopia. They purchase the livestock from these remote areas using the merchant’s foodstuffs or the income from the sales of foodstuffs and other consumables. For their part the agents try to purchase the highest quality livestock and consequently sheep and goats, cattle and camels exported from Berbera have a good reputation in the markets of Saudi Arabia and Yemen (EC-FAO, 1995).

Some *jeebles* still operate, bringing animals from the remote areas not covered by the larger livestock agents and selling them to the traders or their agents in cash or kind. However, they find it difficult to compete in the areas where the agents are operating, because, as one *jeeble* in Burco explained, “The irony is that the commodities of these dealers arrive before I do, at a lesser price.” As a consequence many *jeebles* have become agents for these big traders as they do so.

The dissolution of border controls since 1991 has also contributed to the ongoing restructuring of the livestock trade. In the case of cattle, dealers or their agents usually go to Ethiopia to purchase directly from the producers. In so doing, they circumvent the complex system of *jeebles* and brokers. If they do not do so, some dealers believe that the cattle will be diverted to other markets. Whatever the reality may be, the new system has obvious advantages for the exporters and the cattle producers, because the buyers come to the producers. However, it is also undermining employment in the local markets where thousands now feel their livelihoods threatened. Commenting on this, one cattle dealer said:

It is advantageous to us and to the producer. It is simply good business. We believe also that if we don’t [buy from the producer inside Ethiopia] cattle will be diverted to other markets. The argument that we are weakening local markets and that we are being unpatriotic is misguided, because nobody knows the cost-benefit associated with it.

Despite disagreements about the relative costs and benefits of the new trading arrangements, there is no doubt that these changes have impacted upon terms of trade - that is the exchange of commodities for livestock (*gadbadda iyo neefka*). The profits of both the producer and the exporter are calculated on the basis of the unit price of livestock and the unit price of a sack of grain. The reason for this barter-type relationship is described by one observer as follows:

The local currency, the Somaliland Shillings, for example, may fluctuate in its value against the US dollar. Sugar importers, being pragmatic Somalis, attempt to equate the price of a bag of sugar with the market price of a ram in terms of the US dollar exchange rate. This represents a form of symbiosis between exporters of livestock and importers of sugar (sometimes the same person). (Drysdale, 2000)

These terms of trade have become the dominant force in livestock marketing in Somaliland, influencing every aspect of the market, including movements, transactions and pricing. What has changed is the choice of the producer and the middlemen as to whether to receive payment in cash or in kind. For the agents in a country in which the local currency is consistently fluctuating against the US dollar, it can be safer and more convenient to pay in-kind. The scarcity of currency at peak periods of trading, and the absence of banking and financial institutions also encourages payment in kind.

The overwhelming majority of subsistence livestock producers are not in the business of financial accumulation, and trade only enough to be able to buy basic household commodities (Samater, Salisbury, & Bascom, 1988). In today's market, producers base their calculations and returns directly on *gadbadda*. If they receive a sack of rice or sugar for one head of sheep or goat and with addition of cash of SI.Sh. 10,000, they feel that they have profited. If they receive a sack of rice or sugar for one head they feel that they have broken even.

Rural-Urban Trade

Traditionally nomads used to derive a major portion of their diet from livestock and their products. Today, only a tiny portion of their daily intake comes from livestock products, mainly in the form of milk and the occasional home slaughter. Most comes from imported cereals and other non-pastoral products. Even household utensils, furnishings and tools that used to be home made are imported. In order to keep pace with their growing consumption and use of non-pastoral products, pastoralists must sell a sizeable part their produce, such as livestock, hides, and milk. Thus most of the income of pastoral households is spent on imported items that are available in urban centres.

The complex relationship between *gadbadda* and *neefka* has exacerbated the already unequal commercial relationship between the producer and the exporters, whereby one is selling to meet basic needs and the other is buying for financial gain (Samater, Salisbury & Bascom, 1988). In this partial barter relationship, the producers and the middlemen are asked to take half or more than half of their payments in kind, as rice, sugar or flour. In a typical exchange, a producer might receive 60,000 SI.Sh cash, or the equivalent of 65,000 in kind, from a dealer for a single sheep or goat. The price difference is an incentive for the producers to opt for payment in foodstuffs rather than cash. A further incentive is that foodstuffs will be paid immediately, while cash may take several days. With the limited options available and ongoing daily expenses to meet, most producers are not in position to bargain. One of the pastoralist participants in this study describes the dilemma they face when they bring their herds to the local markets.

Many problems are associated with selling the herds. There are no fixed prices or anticipated prices. The prices depend on circumstances beyond our control and on the number of

animals one brings [to the market]. We never get [the animal's] value, when you compare the price to the effort that went into it. The offers we get from the buyers are half cash and half in kind (sugar, rice, and flour). Sometimes we might need rice and flour, and they offer us sugar, so we literally have to auction the sugar to buy other needs. So we are losers every time.

The revenues generated by livestock sales do not accrue to the producers alone. Before the civil war, at least seven individuals, excluding the producers, had claims on each head of exported livestock before it was shipped out of the country, without adding any value (Samater, Salisbury, Bascom, 1988). Today, at a time of peak unemployment, local livestock markets have become the place where many unemployed people try to get their *maalin dagaal* ('enough to survive in one day'). Consequently, it is not surprising that the number of individuals making claim on each head has increased. In every local market, brokers and other intermediaries visibly outnumber buyers and sellers. Armies of brokers carrying sticks form human circles around small clusters of animals, and much of the time there are more people in the circle than heads of livestock. Each of these brokers gets some of the proceedings from the sale. One participant has estimated that as many as twenty-five people become involved in single transaction at a local market.

Producers and the middlemen see these intermediaries as parasites that are siphoning off their earnings. Some of these intermediaries are very well aware of these concerns, but argue that they deserve to be paid for their efforts in the marketplace. One broker explained the services they render:

Once the herds reach the local market, they fall under our responsibility as brokers. Other than selling them and mediating between the producers and the dealers, we look after them, because our earnings depend upon their well-being. We are the ones who fetch them water, forage and find them holding places, and we make sure that the holding places are free of diseases.

Urban livestock markets are the meeting place for the rural producer and urban consumer, livestock exporters and various intermediaries, and as such are the barometer of Somaliland's economic health (WSP/SCPD, 2000). Large-scale export-import businesses, medium and small scale entrepreneurs, urban middlemen, rural agents and vast network of retailers are engaged at different levels in distributing imported goods within the country and outside the country and ensuring the flow of production from producers to the point of export. Urban livestock centres can therefore be described as critical distributors of wealth, services, goods and a source of employment.

A persistent burden on the livestock trade is multiple local taxation. On the way to local markets and on the return trip, there are often several checkpoints at which producers have to pay local taxes. Although the government has introduced legislation to eliminate multiple taxation, the problem still persists in districts away from the tarmac roads.

Women Traders

In the post-conflict period the number of women involved in trading activities has increased, including in livestock trading activities. They are dominant in domestic meat and milk

marketing, although few have ventured, as livestock traders, into the lucrative export markets like Saudi Arabia. Women in the livestock sector identify several commercial disadvantages that they face (WSP/SCPD, 2000):

- Overspending of their low margin profits- businesswomen tend to spend more in their homes than businessmen do
- Lack of managerial and bookkeeping skills.
- Lack of sources of financing/credit facility.
- Few businesswomen are educated.
- Lack of collaboration - it is harder for women to find long-term business partners.

Slaughter markets

Women tend to be involved in all aspect of the slaughter market (*daabax*), from selling to butchering. It is a trade that provides income and occupational opportunities for many lower income women. Women as *jeeble* purchase female livestock across the border inside Ethiopia, some for local consumption and others to be sent to Djibouti.

Animals for slaughter arrive at the local markets by various means and in various numbers. Most of them come by vehicle and a few are brought on foot. They are either sold to restaurant owners or women butchers, who then go to the local markets (*seylada*) to sell, either for cash or on credit. Most of the meat vendors have regular customers, who are close relatives and friends. This trade is not without problems, as one woman butcher in Burco explained:

Before the truck carrying the animals stop we (women) run alongside the truck trying to compete with *dilaal* (brokers) for one or two animals, but those of us who are weak find it very difficult to make it. Therefore, we have to pay some men - which is an extra cost- to pick up the animals for us.

Milk marketing

The demand for milk is growing in the sprawling towns with their rapidly expanding population. Milk sales have been increasing in Somaliland, developing into an important source of income for the pastoralists. According to one report some 80% of the daily income of pastoralists comes from the sale of milk (Bertolli, 2000). Women dominate this sector, either bringing the milk directly into the urban centres or selling it to associations of women in permanent settlements, who send it on to the urban centres.

In Boorame, each day from dawn to noon, hordes of women carrying milk in one or two litres containers converge on the town from the west, some walking a distance of up to 30kms. Some of these women described their work:

We sell this little bit of milk, just to get some sugar, rice, and tea, and if it is possible, we buy tobacco for our husbands. If we don't sell the milk in time, we leave it with someone and we borrow money to meet our needs.

In the afternoon they return to their homes carrying with them what they have bought from the market. In Hargeysa, women go door-to-door selling milk.

The organized women milk traders work through large networks. Agents are based in various milk collection sites along or near dusty trucks or villages. They collect the milk containers from the pastoral women and truck the containers to their respective agent in the urban centres. In the Jilaal season, when supply is low, the producers are paid in cash or in kind. In the spring, when supply is high, they send their orders for purchase together with the milk. The drivers of the pick-up trucks unload the containers at the sales point. These are made recognizable to local vendors by a distinctive mark or label. The empty containers are later returned by truck to the agents at the collection sites. It is a highly competitive activity. If one of the pick-up trucks fails to reach the market more than once, the driver earns the reputation of *dhadhaaneeye* ('the one that sours the fresh milk'). Not surprisingly, it is common to see trucks carrying milk racing along Somaliland's dusty tracks and tarmac roads at startling speeds.

The currency issue

Even before the collapse of the Somali State, there were two exchange markets, a public official market with a fixed and regulated exchange rate, and an unofficial, or parallel, currency market with a fluctuating exchange rate. The latter offered a better rate of exchange, but the difference between the two rates was insignificant before 1981. From 1982 onwards the informal exchange rate became predominant, and in later years of Barre's regime it was the only exchange rate in operation once the formal banking system collapsed.

Despite the total collapse of formal financial institutions in 1991, the informal currency exchange market was only briefly disrupted. Since that time, a multiple currency system has functioned in Somaliland. In October 1994, after the Central Bank of Somaliland was established, a new Somaliland Shilling was introduced. Today this circulates together with the former Somali Shilling and numerous foreign currencies. The Somaliland Central Bank, which exercises some control over the supply of Somaliland Shillings, has certain influence on the exchange rate. But the market also responds to speculation about the supply and demands for dollars and Somali or Somaliland shillings. Fluctuations in exchange rates tend to take place simultaneously throughout the main trading centres in Somaliland.

The new Somaliland Shilling was first introduced at an exchange rate of SL.Sh 54 to the US dollar in Hargeysa and areas west of Hargeysa. Since then it has faced continual devaluation. A civil conflict between the Cigaal administration and opposition forces coincided with the introduction of the new currency; government printed excessive quantities of the new currency in order to finance its war effort, leading to the Shilling's rapid and dramatic devaluation. By October 1996, the new currency was worth 4,500 SL.Sh. to one US dollar (Bradbury, 1997). Political considerations associated with the war also delayed the new currency's acceptance in eastern Somaliland.

Since the late 1990s the Somaliland Shilling has become relatively more stable. The Central Bank, with a new leadership at its helm, introduced important monetary control measures, curtailing the printing new bank notes, servicing government loans, opening banks in the east and exchanging the government dollars revenue in the market. Besides these measures, other factors that have helped to stabilize the currency since the late include the cessation of internal strife, the temporary resumption of livestock exports in mid-1999 and the printing of large volumes of the old Somali currency by various groups in southern Somalia, reducing the market value of the Somali shilling.

Nevertheless, the Somali shilling has continued to circulate in Ceerigaabo, Burco and east of Burco, mainly because the east is economically tied to the rest of Somalia via the livestock trade. Similarly, in the western part of Somaliland the Ethiopian Birr is used alongside the Somaliland shillings.

After September 2000, when the Gulf States banned the import of Somali livestock for the second time in as many years, the Somaliland Shilling again lost ground against the dollar. The Central Bank tried to intervene by setting daily exchange rates and accused money changers of overvaluing the dollar. But the intervention was not successful, largely because the Bank had no means to increase the supply of dollars in the market and was simultaneously under pressure to expand the money supply to finance government expenditure. In the east of the country where the Somali shilling is in circulation, a influx of new notes drastically devalued the Somali shilling to So.Sh. 18,000 per US dollar, forcing the market in Burco to close several times. Over time there has been a slow dollarisation of the economy with many transactions now taking place in dollars.

In the pre-war period, the forces of supply and demand freely balanced the market system, as the overall system was sensitive to shifts in supply and demand. Market participants acted in a rational economic manner, and producers were generally conscious of livestock prices and the number of animals by species offered for sale in nearby markets (Abdullahi, 1993). In post-war Somaliland, though these freely balancing forces have been literally operate in the same manner, however, market actors, from the producers to the exporters, appear to be acting in an irrational and uneconomic manner. They appear unaware of livestock prices and the number of animals offered for sale at nearby markets. The producers, middlemen, and the exporters somehow do not act upon the available information from the markets, especially when the prices are down. While it may appear economically irrational, their behaviors are not governed by purely by economic factors. Short-term needs and competition strongly influence the local market system.

Livestock export²⁷

Livestock export resumed through Berbera in February 1991, after an interruption in the 1980s due to the civil war. Somaliland has since established itself once more as international

²⁷Other exports through Berbera as indicated by government statistics are insignificant. Both the fishing and frankincense sectors, the other two potential exports through Berbera, have been minor, even during the livestock ban.

livestock trade hub, with exports that far exceed pre-war levels, demonstrating the tenacity and the importance of the livestock sector in Somaliland, and the resourcefulness of Somaliland pastoralists and livestock traders. The bulk of these animals were exported to Saudi Arabia.

As the table below indicates livestock exports through Berbera steadily increased between 1991 and 1998. In 1991, the more exports went to Yemen than Saudi Arabia (EC-FAO, 1995), as trading links with Saudi Arabia had not been re-established. By 1992, 61% of goats and sheep exports went to Saudi Arabia (EC-FAO, 1995). In 1993 livestock exports reached pre-war level, by 1994 they had surpassed the pre-war level and reached record level of almost three million heads in 1997.

Table: Livestock Exports Through Berbera

Year	Sheep/Goat	Cattle	Camels	Total
1991	482,508	11,756	102	494,366
1992	631,192	36,662	389	668,243
1993	1,014,921	80,861	14,824	1,110,606
1994*	1,685,265	55,729	38,025	1,779,019
1995	2,713,597	75,128	21,993	2,810,718
1996	2,417,656	64,596	42,828	2,525,080
1997	2,814,495	66,939	50,587	2,932,021
1998	957,623	92,213	11,663	1,061,499
1999	2,000,335	88,939	34,840	2,124,114
2000	1,233,851	46,289	10,100	1,290,240

Source: Ministry of Finance, 2000

In 1998, livestock exports decreased by 64% from the previous year, due to an import ban on Somali livestock by Saudi Arabia, in response to an outbreak of Rift Valley Fever in southern Somalia. However, cattle, which are usually exported to Yemen, registered a net gain of 27% in that year, and despite the Saudi ban, animals were exported to Oman, UAE, Qatar, and Yemen. It was widely believed that Somali livestock have reached Saudi Arabia through these other countries. When the ban was lifted in mid-1999 exports resumed and a total of 1,480,141 sheep and goats were exported in the second half of that year. The following year 1,062,618 heads were exported during the Haj season. However, a new outbreak of Rift Valley Fever in Saudi Arabia and Yemen in September 2000 led to a total ban on livestock imports from the Horn of Africa by Gulf States. For the second time since 1991, this brought livestock exports in Somaliland to a standstill.

Two bans in four years illustrates the vulnerability of the Somaliland livestock export economy to external market forces. But even before the bans Somaliland was vulnerable to market exploitation. The big Somali exporters send their animals to agents in Saudi Arabia and Yemen. The agents clear the animals through customs, feed and water them, and negotiate a sale, for which they take a fixed commission on each head regardless of the selling price. Without Letters of Credit or other guarantees, Somali traders are forced to accept what is offered, often taking risks in dumping animals at the market. In Saudi Arabia the agent transfers the income to banks in Djibouti, where the big exporters have accounts or business links with Djibouti traders. The income is used to import commodities such as rice, sugar, and flour, which are then used to barter for livestock for future export.

In Yemen the traders are paid in Yemeni Riyals, which they then convert into US dollars or trade goods. Often there are delays in payment, which can lead to substantial financial losses due to inflation. Ironically, in the early 1990s it was the Saudi agents who had assumed the risks by providing cash to Somalis to purchase the animals in Somaliland, for which Somali traders would take a token commission on each head. This arrangement ceased when the Saudi dealers found they could obtain better terms in Jazan, relative to the Somali markets.

The prices of livestock in the Saudi markets fluctuate daily according to supply and demand. In 1994 the average selling price for one head of shoaat was US\$55 (EC-FAO, 1995). As exports increased, the average price per head declined: in 1996 the average sale price per head was US\$38 (Drysdale, 1997), and by 1999 the average fluctuated between US\$27 and US\$32 per head.²⁸ While the sale price has been declining, the total cost per head to the supplier has remained virtually the same. Two independent studies (EC-FAO, 1995 and John Drysdale 1997) estimated this to be US\$ 38.18 and US\$37.1 per head respectively. In other words, over the last five or six year it would appear that livestock export has become unprofitable and that traders are, in theory, losing money.

The losses, however, were attributed by some workshop participants to the exporters undermining their own interests, by dumping livestock on the market. For example in the year 2000, the Haj season, which is considered the most profitable season, failed to live up to expectations. In the words of one Hargeysa livestock dealer:

The Haj season is usually the most profitable season, but a loss of US\$ 10 per head was recorded in 2000 Haj season. Because of that for three months no animal were exported to Saudi Arabia. For those who exported cattle to Yemen, they too have received money no for over three months for cattle they shipped.

Table 4.1: Sheep and Goat Exports at Haj Season of the Years 1994,95,96,97* &2000

Year	1994	1995	1996	1997	2000
1st month	102,793	278,406	181,414	208,810	404,290
2nd month	112,793	441,368	222,631	487,327	440,290

²⁸ Information provided by workshop participants and other informants.

3rd month	114,150	111,575	285,091	219,851	218,106
4th month	59,180	196,218	54,174	145,758	17,975
5th month	114,121	201,284	166,072	151,115	29,957
Total	503,037	1,228,851	909,382	1,212,861	1,110,618

Source: Somaliland Ministry of Finance. *98&99 KSA ban on livestock import was in effect.

In the above table the first three months coincide with the Haj season. As indicated by the table a record level of livestock was exported in 2000 Haj season. It is normal that exports fall in the two months that follow the Haj season. However, it seems that in 2000 the exports saturated the Saudi market, which reduced exports in the following months to an exceptionally low level. The large number of exports in 2000 was a response to the lifting of the import ban by the Saudi government.

The absence of a commercial banking system that can issue Letters of Credit (L/C) has also contributed to the losses incurred in livestock exports to Saudi Arabia. As noted above, exporters send their livestock to KSA without any price guarantees and take what the market offers. Letters of Credit act as a price guarantor or stabilizer by stipulating the quality and the price of the livestock prior to export. If the livestock meet the conditions stipulated in the L/C, then exporter will receive the state price. The system of L/Cs can also be used by a government to regulate the flow of livestock exports to major markets; by controlling the issuance of L/Cs, a government can prevent uncontrolled exports (dumping) and the saturation of the export market.

Another self-inflicted handicap to the profitability of Somaliland exports is the multiple taxes and surcharges levied at Berbera. Export taxes are levied at a rate of \$3.5 per goat or sheep, \$12.5 per camel and \$7.5 per steer. Additional taxes and surcharges amount to Shs. Sl. 697.75 per goat or sheep, Shs. Sl. 5,390 per camel and Shs. Sl. 4,120 per cow (see table). Livestock dealers have to pay these taxes at different offices rather than in one or two places, costing additional time and money. This means that dealer pays a total of \$3.73 per head of sheep and goats, \$9.3 per head of cattle and \$14.3 per head of camels.

Table 4.2 Charges per head in Somaliland Shillings, August 2000

Type of taxes/charges	Goats/Sheep	Camels	Cattle
Customs of Berbera	64.00	580.00	420.00
Port of Berbera	159.75	1,230.00	420.00
Municipality of Berbera	300.00	2,100.00	1,800.00
Water Agency of Berbera	104.00	1,040.00	1,040.00
Ministry of Livestock	10.00	40.00	40.00

Chamber of Commerce	60	400.00	400.00
Total	697.75	5,390.00	4,120.00

Source: Somaliland Chamber of commerce (US\$1 – Sl.Sh 3,000)

The difficulties facing the livestock trade are one reason for the emergence of fewer large-scale traders. Mid-level traders find it difficult to remain in the trade. Only the big traders are able to offset losses by bartering their imported foodstuff with livestock.

Bosaaso is the only other Somali port that has been regularly exporting livestock to Saudi Arabia, since the collapse of Somali State. Located on the Red Sea coast east of Berbera, Bosaaso taps the livestock export market from areas within Somalia and Somaliland and is Berbera's only competitor. But Bosaaso's traders usually face lower profit margins when compared to that of Berbera, due to the greater capacity of Berbera and its closer proximity to the export market (EC-FAO, 1995). Somaliland traders have the means to buy and handle large consignments, and have extensive agents through out Somali territories for purchasing high quality livestock.

Table 4.3 Sheep/goat export 1996 to 1998

Year	Berbera	Bosaaso	Ratio
1996	2,417,655	588,379	4:1
1997	2,814,495	508,320	5.5:1
1998*	957,224	344,220	3:1
Total	6,189,374	1,440,919	4:1

*Livestock ban was in effect. Source: WSP and GOS, 2000.

Somaliland's dependency on a single resource/single export market makes the economy vulnerable to changes in that market. The impact of the 1998-99 ban by Saudi Arabia on the import of Somali livestock in the wake of Rift Valley Fever outbreak was dramatic. The impact of the ban imposed in September 2000 could be even more dramatic because it has been comprehensively applied by all Gulf States. The previous ban was partial, imposed only by Saudi Arabia, and could be circumvented through Yemen and Dubai (UAE). This time the back-door routes were closed. However, in April 2001, a UNDP funded initiative to look into the possibilities for resuming livestock exports from the Horn of Africa and chilled meat, did lead to the resumption of these exports to the UAE. In December 2001, Yemen briefly lifted its ban on Somali livestock.

The 1998 ban affected all sectors of society, both urban and rural, and all economic activities to a standstill. Herders, traders, service providers, petty traders, local and central government all lost income. The availability of hard currency and food imports declined. There was a

drop in employment opportunities for poor urban and rural groups and a devaluation of the Somaliland Shilling against the US dollar.

The reduction of government revenue puts enormous strains on the Somaliland government's budget. According to senior officials in the Ministry of Finance, revenue from livestock exports constituted as much as 33% of government revenue in 2000. However, since not all livestock export revenues are reflected in the budget, this figure may be an underestimate. The 2000 budget submitted by the government was 74 billion Somaliland Shillings, equivalent to US\$25 million²⁹. By the end of 2000, there was a shortfall of 5 billion shillings due to the livestock ban. In 2001, the budget submitted by the government was 87 billion Somaliland Shilling, as the government had increase export taxes and improved its revenue collection systems. However, in real terms this budget was equivalent US\$13 million - about half of the 2000 budget - due to the devaluation of Somaliland shilling.³⁰ The situation has been further complicated by the government's maintenance of an "official" exchange rate: this rate applies to export duties and for much of the period in question it was fixed at Sl.Sh.2, 500 per US dollar, approximately half of the market rate. The official devaluation of the Shilling in 2001 meant that importers would pay the full market price (7,000 Sl.Sh.) - an increment of 280%. These measures provoked widespread protests and the government was rapidly forced to compromise.

The government had obvious reasons to take such measures: one is that government revenues would increase without causing any burden to ordinary people's, by stopping what essentially amounted to an import subsidy. Surprisingly, the move encountered stiff resistance, not only from the importers, but also by ordinary people who perceived the change as a tax increase, since the importers would pass it to consumers. As a result, *qaad* importers have increased the *qaad* prices and have tried to smuggle the *qaad* to the country, which led to some confrontation. In Berbera, importers refused to pay the new charges. The importers argued especially (food stuff importers) due to the low margin of profit they didn't value the dollar from import tax at market value as assume by the government and that assumption was misleading. In the end the government was obliged to increase the dollar value of import tax to 4,500 SlSh. In another words reinstated the multiple exchange rates.

Similarly, the ban has created a budgetary crisis for households throughout Somaliland. The devaluation of Somaliland Shilling from 3,000 per US\$1 to 5,600 per US\$1 has reduced household purchasing power, while the price of imported cereals has increased. It is reported that people have changed their consumption patterns by switching to cheaper cereals and reducing the amount they eat (IRIN, 2001).

Financial instability created by a devaluation of the Somali Shilling due to the livestock ban, combined with the introduction of newly printed Somali shillings, has been particularly in Burco and areas east, leading to demonstrations, market closures, and business failures. Some retailers to accept only old Somali Shillings or hard currencies, or have periodically

²⁹ January-September the market rate was 3,000 Somaliland Shilling to one US dollar.

³⁰ July 2001 the market rate was 5,600 Somaliland Shilling to one US dollar.

refused to accept bills of certain denominations. Devaluation of Somaliland Shillings has also disturbed market activities in Hargeysa, but to a lesser degree.

One problem in assessing economic fluctuations in Somaliland is the difficulty of quantifying the actual national income from the pastoral sector. This is due to what the International Labor Organization has described as the “highly unconventional” nature of the Somali economy, which does not lend itself readily to standard measurements of economic activity (Drysdale, 2000). A study in 1998, which sought to determine the actual national income generated by livestock exports, concluded that the income generated by livestock exported through Berbera to Saudi Arabia in 1997, at producer prices, was around US\$93 million (in cash or equivalent in sugar). This gave a national income of US\$176.6 million (Drysdale, 1998). The Human Development Report of 1998, however, estimated the value of livestock exports in 1997 to be US\$ 120.8 million.

The only source of income comparable with livestock earnings, and which may even exceed them, is remittances. The economic importance of remittances has been increasing since the oil boom in the Gulf States in 1970s and became more significant in the post war period, as the main source of income and foreign exchange earnings, when thousands of refugees migrated to Europe and North America. Remittances largely averted an economic disaster during the livestock export ban of 1998-9 and again since 2000. Remittances have financed ongoing economic activities such as the housing construction boom and import activities.

Those involved in the business of remittances (*xawaaladaha*) in Somaliland report an increase in the volume of remittances received during the livestock ban, although there is no reliable estimate of the size of that increment. Similarly, it has been very difficult to estimate the size of the remittances before and after the Somali civil war. In 1987 remittances to Somalia from abroad were estimate to be between US\$478-540 million annually (Green and Jamal, 1987). Post-war there have been many estimates. According to Ahmed (2000) the overall annual value of remittances to Somaliland alone is estimated to be \$500 million. Most estimates place the figure at less than half this figure.

The estimation of remittances in Somaliland is problematic for a number reasons (Ahmed, 2000):

- They are transferred in number of forms and through different channels
- They can be in cash and kind
- No data is available on the global numbers of migrants

The benefits of remittances are not equally distributed remittances are largely concentrated in urban centres. Less than 5 percent of rural households, and an even lower percentage of pastoral households, receive money transferred from abroad (UNDP, 1997; Ahmed 2000).

Regulation and policies

Somaliland's livestock export trade suffers from an institutional crisis and a totally unregulated environment. According to one veterinarian, out of seventy livestock dealers to

whom he used to offer services, only nine are now in business and they are all close to bankruptcy. The development of positive regulations and policies by the government that would promote livestock export and the adherence to these by the actors involved in this sector is one way out of the crisis. Workshop participants identified the following key issues:

Livestock dumping

To participants in this study, the main cause of destruction of Somaliland's overseas markets is 'dumping'. Eliminating this practice may be essential to the preservation of Somaliland's economic and political stability. In the words of an ex-livestock dealer in Hargeysa:

The situation is alarming and if we don't do anything about the current practices in term of livestock trading, our existence as nation will be in jeopardy. We can't let few greedy people destroy our future.

Finding a solution for this complex issue has proven difficult, despite various attempts by the authorities and exporters in mid 1999. The Somaliland Chamber of Commerce took the initiative to address the problem. After serious consultations with the leading livestock dealers in Somaliland, a formula to limit the number of livestock being shipped to Saudi Arabia was reached. Seventeen livestock dealers signed this arrangement, which included the following elements:

1. To ship on alternate nights one or two ships that carry a total of 1,200 heads of sheep or goats and 300 heads of camel, based on a first come, first serve basis.
2. To create a committee to list the arrival of the ships and their turn for shipments. The committee is to consist of the following:
 - Governor of Saahil Region, Secretary
 - Member of the port administration, Member
 - A member from the Chamber of Commerce, Member
 - Four members selected from Shipping Agencies, Members
3. This arrangement is not applicable to the Haj season and the month of Ramadaan
4. Progress should be reviewed after three months

The news that there was an arrangement in the making had an impact on the Saudi market. After it was signed and put into effect the market reacted positively. However, the quota system did not last because the big livestock dealers would not wait for their turn. Moreover, the big dealers felt that the arrangement was unfair to them, as it treated everyone on an equal footing and did not take into consideration the different capacities of the dealers.

Opponents of this type of regulation argue that it will divert livestock export from Berbera to other ports in Somalia, and that once the market improves in Saudi Arabia exporters from

Somalia and elsewhere will reap the benefits. Moreover, they allege that this arrangement would be susceptible to favouritism, discrimination and corruption.

Supporters of such regulation argued that the arrangement did take these concerns into consideration, and that the proposed quota system would not create a shortage in the Saudi markets for others to exploit. Moreover, since livestock from Berbera is superior to livestock exported from other Somali ports, they contend that the opportunities for competitors to take advantage of would be insignificant. As for the vulnerability of the system to manipulation, they argue, no system is perfect.

The failure of successive attempts to regulate livestock exports appears to indicate that unless the major dealers are severely affected by the unprofitability of livestock dumping, they will resist regulation. This moment may be sometime in coming, if ever does, because most major dealers are able to compensate for their export losses by raising their profit margins on imported commodities.

Livestock dumping on foreign markets is considered in many countries to be a form of “unfair competition” that is driving the other livestock exporting countries out of business. The practice undermines the whole marketing process and price structure. In the case of Somaliland, dumping is not done deliberately to harm other countries, but it could potentially lead to a political backlash and economic sanctions from other livestock exporting countries. Big exporters like Australia are unlikely to remain passive while Somaliland destroys the Saudi market³¹.

Although there is a dire need for livestock market regulation, instituting a regulatory measurement that would satisfy all concerned parties will not be simple. Enough is known about the problem to conclude that the consequences are severe, and that it will get much worse if nothing is done. But Somaliland’s commercial and political leaders seem to lack either the will or the capacity to take effective remedial action.

Multiple taxation

Livestock dealers have consistently complained about the unfairness of the multiple taxes and levies on export livestock and have asked the government to reduce these taxes. The government plan to reduce export taxes in the 2001 fiscal year was set back by the livestock ban.

The level of the current taxation is to a large extent a legacy of the Barre regime, as the tax structure of the previous government has been reinstated by public institutions that are run by officials of the former government. For some people, this seems to be a betrayal of the sacrifice and ideals that lay at Somaliland’s foundation.

The government imposition of export taxes on livestock export has an economic rationale. It is one means, however controversial, to generate hard currency to ensure the stability of

³¹ There is strong belief in Somaliland that Saudi’s ban on Somali livestock imports was imposed for political and economic reasons.

the Somaliland Shilling, and thus arguably serves as an anti-inflationary measure. Under the previous regime, livestock exporters had to deposit some their income in the Central Bank in exchange for Somali Shillings, to allow the government to obtain some of the hard currency. The Somaliland government tried to implement a similar policy, but this did not work because the official exchange rate was far below that of the market and the government lacked formal control over the livestock trade. It therefore opted for direct taxation.

Despite the various charges and levies on livestock, the government provides virtually nothing in the form of services to livestock exporters. The cost of shades, water, forage and security guards are assumed by the exporters. The water system has been partially rehabilitated for government-run facilities at Berbera, but is inadequate to reach the privately owned marshalling yards. Traders who use these private facilities must haul water to their animals by tanker truck.

The absence of financial institutions

Somaliland livestock exporters operate in the absence of supporting financial institutions. This places them at a disadvantage vis-à-vis competitors. Livestock traders unanimously agree that the key to market regulation is the availability of Commercial Bank that can issue of Letters of Credit. “Without letter of credit (L/C)” said the Director of the Chamber of Commerce, “any one who has money can export livestock to anywhere, at anytime and on anything.”

The availability of such services would allow the government to easily regulate the market, by excluding those exporters without L/Cs. Since L/Cs stipulate the quality and the price of the livestock to be exported, they would ensure quality control in the livestock marketing system, from the production point to the export outlet. In addition it would eliminate the huge risks Somaliland livestock exporters are undertaking.

The question is whether this is achievable given the current political situation in Somaliland. Many experts in this field believe that it is, but that it requires considerable effort from both the government and the private sector. One possibility might be to solicit services from a commercial bank in a neighbouring country that could open a branch in Somaliland and issue L/Cs³². This arrangement could be monitored and regulated by the government. Another possibility might be to ask the livestock traders to deposit money in an offshore bank, which then issues L/Cs to a private representative or agency. Although this arrangement is feasible, many people feel it would very difficult to enforce compliance. The government will find it hard to monitor and regulate, and it is similar to the proposed quota system that the major dealers have already abandoned.

³² The government has been pursuing such an arrangement with the Ethiopian commercial bank

Market diversification

A woman on a Hargeysa bus remarked of the livestock ban: “Is it only the Saudis who eat our meat?” Likewise, participants in the research process also emphasized the need for Somaliland to explore alternative markets.

Some participants felt strongly that there is a need to look for an alternative market to Saudi Arabia. There are many countries to which Somaliland’s livestock might be exported, including Egypt, Iran, and Jordan. Libya has been interested for a long time in Somali livestock and, in June 2000, the first shipment of 900 camels was sent there. However, it will require effort and organization to break into these markets.

During the ban, traders sought to export livestock in many different ways. Some tried to smuggle livestock to Saudi through Yemen, and some tried their luck in other markets such as Kuwait, Oman, and Qatar. Overall their efforts were rewarded by financial losses, and in some cases theft.

Others participants in the study felt that, though there is a need to explore new markets, it is equally important to consolidate Somaliland’s position in existing ones: “What is the use of finding another markets, if we are going to destroy them, as we destroyed the previous ones?” Somaliland’s dependence on the Saudi market, they argued, is less a matter of choice than a matter of circumstances. Finding similar markets for Somali livestock exports on the hoof, in terms of absorptive capacity and profitability, will not be easy. The Saudi market is big, offers good prices, is closer to Berbera, and has a marketing system that specializes in selling Somali livestock to Saudi consumers. No comparable market currently exists, or is ever likely to.

Product diversification

Exporting frozen meat might be an alternative route to expanding Somaliland’s export potential. In late nineties, traders in Muqdisho and Galkaacayo began to export frozen meat to UAE by air, and were largely unaffected by the Saudi ban. In Somaliland, a modern meat processing plant was completed in Burco in 2000 with capacity of processing 750 heads of goats and sheep per day in two shifts.. Though livestock export has resume partially, the plant is not in operation.

Some observers, however, question the profitability and competitiveness of chilled meat for export. One participant in the study commented:

Our animals aren’t competitive in terms of weight and price, and no one would slaughter those animals for export (*abmi*) as frozen meat. Therefore, they would concentrate on the small animals and females (*daabax*) and that would naturally increase the prices of local markets and harm animal reproduction

There is insufficient data from other areas involved in chilled meat exports to substantiate this claim, but there is certainly cause for concern. In Galkaacayo about 12,000 heads of young animals between 4 and 12 months old (both male and female) are slaughtered weekly

to be exported as frozen meat to UAE (WSP/SCPD, 2000) – a scale of off take that would indeed have long-term repercussions for animal reproduction in Somaliland

Another alternative might be the manufacture of animal products and by-products as an important supplement to the export of livestock on the hoof. But participants are sceptical about their development with the exception of hide and skin beyond local consumption. The estimated total availability of raw hides and skins in Somaliland is currently 2,500, 000 pieces (Bertolli, 2000). In the pre-war period and historically, hide and skin has been major trading item. Export in hide and skin has resumed and was profitable in early nineties experiencing an increased in export. As result of flooding the market prices went down and export fall sharply in mid nineties as indicated by table 4.4. Though in 1998, export has recovered export earning still remains very low and less competitive and it attributed to lack of processing facilities and lower quality-as they are damaged by branding the animals. Now in Burco there is tannery plant with processing capacity of 2000 skins per day that has been working for about two years and processing about 800 pcs per day. Some of these products are being used locally and some are export. Also, at the time of writing there is another skin and hide tannery plant under construction in Lasqooray.

Table 4.4 Skins and Hide Exports

Year	Pieces
1994	737,964
1995	356,818
1996	51,500
1997	33,737
1998	500,788
1999	939,922

Source: Somaliland Ministry of Finance

Milk products offer another means of diversifying the economic potential of livestock. Clarified butter (ghee) is sold for local consumption and for export, particularly to Yemen, where women - most of them from western Somaliland, send 40-60 litre containers of ghee to Yemen on ships from Berbera. Nevertheless, Somaliland remains an importer of ghee. Likewise, although domestic milk sales have grown dramatically over the past years in Somaliland, they are far short of meeting the domestic needs of the country, and Somaliland still relays on dry powdered milk imports.³³

³³ In 1999, Somaliland has imported about 130,619 cartoons of milk power and 227,145 kgs of Butter ghee.

5

Animal Health

The health of livestock is bound up with the availability and quality of rangeland resources and impacts on the health and wealth of pastoralists. Animal health is also a critical trade issue, as the embargo by the Gulf States on livestock imported from Somaliland illustrates. To be competitive in today's world market, it is necessary to have an effective marketing strategy. Ultimately, however, one's competitiveness will depend upon the condition of one's product. As the Director of the Somaliland Chamber of Commerce noted, "You can't separate marketing from the condition of your product." This section considers the quality of Somaliland's main export product - livestock - from a health perspective.

In the years before the collapse of the Somali state, the quality and quantity of animal health services in Somalia was in decline. From the perspective of livestock producers, a sufficient level of services has never been achieved, either during the colonial period or since (Bauman, 1993). The decade-long armed struggle between SNM and the Somali government in the 1980s aggravated the situation of animal health services delivery in Somaliland, as what little infrastructure existed was destroyed or looted. Despite the establishment of an administration in 1991 and the creation of Ministry of Livestock, animal health services in Somaliland are currently rudimentary, ad hoc and far below the pre-war level. The government lacks the means to develop a functioning veterinary care program, and has been unable to regulate and coordinate the activities of the various non-governmental actors involved in livestock health care.

A Brief History of Animal Health Services

Somali pastoralists have always used indigenous medicines and techniques to treat their animals. These are inadequate, however, to deal with epidemics. In 1924 the British established the first Veterinary Department in Somaliland in response to a severe outbreak of rinderpest (Peck, 1962). After, independence in 1960, the veterinary departments of the two former colonies merged as part of a national effort to unify the two colonial administrative systems, but the first Somali veterinarian was not employed until 1964 (Baumann, 1993).

The first major activity of the new department was a rinderpest vaccination campaign in 1969 (Baumann, 1993). But according to a veterinarian from the Ministry of Livestock:

The last time our animals received comprehensive animals health services, such as blood, faeces and urine testing to investigate and monitor the condition of our animals, was when the British Veterinary Team was present. This team, which was stationed in Hargeysa and used to cover what used to be north-west and northeast regions, came to Somalia in 1965 and was expelled in 1972. Since then, the animal health services in Somalia have been mediocre.

In the early years of the Somali ‘socialist revolution’, livestock health care expanded rapidly in nomadic areas along with other basic social services. Animal health services under the military regime were provided exclusively by the state through the Ministry of Livestock, Forestry and Range Management, which was characterized by central control, a stifling bureaucracy and a dependency on bilateral aid. The ministry was divided into four main departments:

- Animal Health
- Animal Production Development
- Planning and Statistics
- Administration

In addition to the national programs administered by these Departments, the Ministry also administered through either its own departments or autonomous agencies 11 bilaterally funded multi-million dollar projects³⁴. This included:

National Range Agency (Autonomous)

- North West Range Development Project (NWRD)
- Central Range Development Program (CRDP)

The Ministry

- Veterinary School
- Faculty of Veterinary Medicine and Animal Husbandry in the Somali National University (SNU)

Marketing and Health Development (Autonomous)

- Livestock Marketing and Health Development Project

Animal Production Department

- Poultry Feed and Concentrates (formulation factory)
- Poultry Production and Demonstration Farms
- Dairy Farm with Demonstration Farms
- Artificial Insemination Centre

³⁴ Despite these multi-million projects, which had different life spans, government contribution to the sector was very low (less than 2% of the budget in the period 1960-1985) and provision of services was very poor. Only one of the programmes/projects listed above was active in the North (Somaliland), and few of these projects were directly beneficial to pastoralists.

Tsetse Fly (Autonomous)

- Tsetse Fly Project

Animal Health Department

- Pan-African Rinderpest Project
- Serum and Vaccine Institute

(Source: SCPD/WSP, 2000)

The highly centralized structure of the Animal Health Department extended all the way to the village level. It was designed primarily to control society, and had only limited impact on Somali pastoralists due to its complexity and inefficiency. At the district and village level, the crucial animal health service delivery points in pastoral areas, staff were rarely present and those who were, were inadequately equipped (Baumann, 1993). When compared to that for human health and education, government investment in the livestock sector was relatively low.

The government livestock health programs in the 1980s were marked by rampant corruption and mal-administration. Clan favouritism, nepotism, misuse of public funds and poor accountability were rife. Hyperinflation and the war in the north further impaired the operation of livestock services. These programs were therefore seen by many people as existing for the employment and the enrichment of government employees and their cronies, rather than serving the pastoralists (WSP, 2000).

The failure of public institutions to provide animal health care delivery, particularly of essential drugs, fostered a parallel private market for veterinary services and drugs. Private vendors, petty traders and even government officials became involved in selling public and private supplies.

Animal Health Services in Somaliland since 1991

Animal health services in Somaliland have, like other basic social services, evolved haphazardly since 1991. Lingering suspicions and cynicism inherited from the practices of the previous regime and the trend towards deregulation and privatisation of veterinary service delivery has plunged animal health services in Somaliland into a crisis. Today, despite the availability and affordability of essential drugs and the presence of qualified and skilled private veterinarians, services are primitive and disorganised, and focused on lucrative livestock export operations. Lack of appropriate infrastructure and technical expertise, has undermined the provision of animal health services to those pastoralists rearing animals away from the export and market centres. There is a general agreement between the main actors about giving the private sector a wider role in the provision of health service, but none of them have been able to adjust in a systematic way to the new situation. The uneasy working relationship among the government and private veterinarians and international NGOs has

resulted in poor operational guidelines, unclear policies, inadequate co-ordination and inappropriate planning.

In the absence of formal veterinary services, pastoralists and veterinarians around the country are reporting the emergence of new diseases, although this is difficult to verify since there are no monitoring systems or diagnostic units. Some investigations have indicated that at least two diseases may have been newly introduced into Somaliland in the last decade (Ibrahim, Undated). Workshop participants, however, concluded that despite the lack of animal health services, there has fortunately been no major disease outbreak in Somaliland over the last decade. This situation could be attributed to the non-occurrence of major environmental hazards, such as prolonged drought, which plays a greater role than disease in the health of indigenous livestock (Heuer, 1999). This, however, does not rule out the presence of fatal diseases, or a future epidemic outbreak.

Issues and Actors in the Animal Health Sector

The Ministry of Livestock

In Somaliland the livestock ministry, with structures similar to those of the previous regime, is responsible for establishing public policy on animal health service delivery in pastoral areas. The stated policy of the government is that the private sector will provide curative veterinary services under government supervision. This is intended to give the private sector a far greater role in service provision than before (Ibrahim, Undated). However, with only limited funds allotted to the ministry, it has difficulties in fulfilling its own newly defined core functions.

Despite the significant contribution the livestock sector makes to Somaliland's GDP, it is given low priority by the government for funding. In 1999 the Ministry was allocated only 58 million Somaliland Shillings from the national budget of 42 billion. At 0.14% of the national budget, this was among the lowest allocations for any ministry. Administrative and personnel costs consumed the entire allocation. In May 1999, when Saudi Arabia lifted the first livestock ban and government revenue increased, 15 billion Somaliland Shillings were added to the budget. Ironically the livestock sector, which generated the windfall revenue from the lifting of the ban, received the smallest budget increase of all of the government ministries.

In an effort to boost the ministry's allocation after the resumption of livestock exports, its budget was quadrupled for the fiscal year of 2000. It still accounted, however, for only 0.7% of the national budget. The budgetary increase represented an attempt by the government to initiate some animal health programmes. The funds were allocated for the creation of a mobile veterinary team, which would have provided the first contact that the government has had with Somaliland pastorals since 1991. The program failed to materialise due to budgetary shortfalls that resulted from the second embargo on Somali livestock imposed by Gulf States in 2000. The only part that was implemented was the purchase of two pick-up trucks for the mobile team.

Other Ministries that deal with this sector didn't fair better. In 1999 the funds allocated to the Ministries of Rural, Agriculture and Water were So.Sh. 10.7, So.Sh. 8.2, and So.Sh. 7.4 million respectively, out of a national budget of So.Sh. 42 billion, or about 0.25%, 0.20% and

0.18% respectively of the national budget. And in 2000, their allocations were respectively So.Sh. 310, So.Sh. 345, and So.Sh. 237 millions from a national budget of So.Sh. 74 billion, accounting for 0.4%, 0.46% and 0.31% of the total respectively.

One of the persistent legacies of the previous administration is the public expectation of government in the provision of animal health services. However, such expectations seem unrealistic, as a senior official in the Ministry of Livestock explains:

What the people have in mind is the previous ministry, which had so many agencies and multiple funding from various bilateral aid sources. Wherever you go, people are complaining about the absence of the ministry and they are saying the ministry is not doing this and that, and so on, and they tend to forget that the Ministry is weak in terms of resources. So many people involved in the sector are waiting for the Ministry to act.

Somaliland's animal health policy assigns the private sector the primary role in the delivery of animal health services. Translating this into effective action, however, is a major problem because the management practices of the ministry and the attitudes of ministry officials have not changed. Most of the senior officials in the ministry worked under previous regime, which was highly centralised and directive. There is, therefore, a general lack of understanding of the potential benefits of privatisation and a fear on the part of many officials and public veterinarians of losing their positions. This has strained the relationship between the ministry on the one hand, and private veterinarians and international NGOs, who tend to promote the private sector, on the other. The ministry believes international agencies are promoting privatisation without government consultation, creating a parallel veterinary service. Ministry officials also tend to perceive private veterinarians as competing with them for access to meagre external resources. Some ministry officials see the role of the private veterinarians as a temporary solution, filling a vacuum created by the ineffectiveness of the ministry, and believe there should be a return to a centralised public system of delivering free services.

Effective private sector delivery of animal health services will not be realised without the full support of the government. Consultation and dissemination of information by international NGOs to officials in the ministry is an important factor that in shaping government attitudes towards privatisation. On their part, officials in the ministry need to come to terms with the fact that, given the government's limited resource base, effective animal health services will not be realised without the development of the private sector. This will require a close working relationship between the ministry and private sector actors, including a jointly developed strategy for the sector. Overcoming the entrenched attitudes and interests that impede such an approach will require patience and time.

One way that the ministry could dispense its stated mandate is by increasing its annual budget. This means persuading the government of Somaliland to assign a higher priority for funding to the livestock sector, a decision that may require pressure groups of pastoralists, veterinarians and the private sector. Notwithstanding the many urgent priorities that the government faces in terms of resource allocation, the small budget of the Ministry of Livestock revives memories of neglect of this sector by past governments. This should be reviewed and the Ministry should play a leading role in finding realistic solutions.

Private Veterinarians

When Somaliland reclaimed its independence in 1991, many veterinary professionals employed by the former ministry, who had lived and worked in the south, moved to the north. In 1992 they began to create private associations and to initiate veterinary services under difficult circumstances. Their efforts were hampered by the sporadic civil strife within Somaliland in 1992 and 1994. One workshop participant nevertheless credited these associations with having “initiated and contributed to the establishment of veterinary services in Somaliland.”

Most veterinarians are located in urban centres. This is a major constraint to livestock health care in pastoral areas, denying access to those who need it most. Numerous factors contribute to the non-availability of professionals in nomadic areas, foremost of which is the low number of veterinary professionals in Somaliland. Although it is hard to verify the exact number, reports estimate the number of veterinarians, assistant veterinarians, and other skilled veterinarians in Somaliland to be about 150 (Ibrahim, Undated; Abdi & Hussein, 1998) - too few for Somaliland’s geographical area of 137,600 square kilometres and a livestock population of 10,138,06 goats, 5,478,038 sheep, 5,395,242 camels and 2,766,791 cattle, which amount to 10.6 Tropical Livestock Unit (TLU).³⁵ Some of these professionals are of retirement age and most are in need of training and refresher courses. Worryingly there are no new veterinarians entering the system since there are no veterinary colleges or specialised institutions to provide formal training.

The location of veterinary professionals in the main cities, especially Hargeysa, hinders the delivery of animal health services to where it is most needed. Most of their activities do not reach beyond a 20-kilometre radius of their base (Abdi & Hussein, 1998). In part, this is due to the logistical difficulties of working in pastoral areas. These areas are characterised by a harsh climate, poor infrastructure and relatively small but dispersed and mobile human populations. The veterinarians in Somaliland do not have the capacity, in terms of capital, transportation, communication and access to veterinary supplies, to serve these areas. The absence of diagnostic facilities means that investigation or detection of diseases cannot be conducted. Veterinarians, therefore often find it difficult to identify the diseases they treat and their diagnoses are often based on guesswork, without the benefit of laboratory services.

In addition to the technical, manpower and equipment problems, there are important economic constraints to contend with. Those private veterinarians who want to offer their services to the pastorals find it economically unfeasible. In the words of one veterinarian:

Once you go there, you can help by treating sick animal, but you need to charge for the drugs to cover one’s minim expenses. But this usually does not happen, as the livestock owners believe that the drugs were donated to them and should be free of charge - a lingering legacy from the previous regime when pastoralists received free drugs. So it is not economically feasible to serve them.

³⁵ Recommended staffing levels for tropical livestock units 240,000(TLU)/veterinarian and 12,500 TLU/veterinary assistant (de Haan and Nissen, 1985).

Another legacy from the previous regime is that professionals were trained in public institutions and worked in a highly centralised system, which was heavily dependent on bilateral aid. Many of them seem to be waiting for the return of previous system, speaking of how things used to be rather than proposing new systems and techniques. This suggests they lack the flexibility to adapt to the new deregulated environment of commercialised livestock health care in which they must organise and manage their own work, purchase their own supplies and keep accounts.

Driven by the profit motive, most private veterinary associations in Somaliland are engaged in the lucrative service of testing export animals at the port of Berbera for brucellosis. Many other veterinary professionals work for the Ministry of Livestock. Not coincidentally, their services tend to benefit the larger livestock dealers rather than rural pastoralist clients.

Recognizing its current limitations, the Ministry of Livestock has restricted its own responsibility to core functions such as policy and regulation, with curative services delegated to the private sector. Many participants in this study believed that the embryonic private veterinary sector is ill-prepared to assume these new functions, and that the fledgling Ministry should maintain a more active role. Given the broad agreement that a return to the type of centralized, government-run services of the past is neither possible nor desirable, it would appear that further effort is required to define the optimum role of the state during this transitional period.

International Agencies

In the absence of effective public institutions in the post-war period, international aid agencies have become heavily involved in all major social services in Somaliland. However, their engagement in the animal health services has been relatively limited. Given the important role that pastoral economy plays in the rebuilding of Somaliland and the welfare of the people, it is surprising that the level of external funding directed towards animal health programs has been so low. In comparison with other social service sectors, workshop participants described the livestock sector as the most neglected by international agencies. One private veterinarian commented that:

Out of forty-three international NGOS and aid agencies operating in Somaliland, only a couple of them are involved in the livestock sector and those connected with livestock don't contribute much.

Specifically, the few international organizations that have been involved in animal health care are the International Committee of the Red Crescent (ICRC), VetAid, ActionAid, Terra Nuova and the Kenyan Agricultural Research Institute (KARI). Their activities have generally been low-key projects of limited duration.

ICRC ran the first emergency livestock health program in Somaliland during the critical years of 1992-1993. It conducted a major vaccination program through out the country, that is still considered to have been the most important intervention in the sector. ICRC terminated its program in 1993.

VetAid, and Terra Nuova have remained active in the livestock sector over a longer period. Their programs are limited both in terms of scope and resources. According to one senior official in the Ministry of livestock, the annual funding of each of these agencies doesn't exceed US\$ 35,000³⁶. They tend to be oriented towards promoting the private sector, by offering training through workshops and seminars to those who are involved in the livestock sectors, such as the producers, veterinarians and drug vendors.

KARI conducted four workshops in Hargeysa, funded by EU in collaboration with the government, between 2000-1. The first workshop was specifically for government veterinarians while the other three workshops involved all actors in the sector. The objective of these workshops was to help the various actors to develop programs and an overall strategy. KARI has also offered to take animal blood samples for testing.

At the end of 1999, European Commission (EU) contributed US\$70 million to a five-year program to prevent communicable animal diseases in the Horn of Africa. The funding was given to the Pan-African Programme for the Control of Epizootics (PACE). PACE has engaged field officers responsible for the program in Somalia and Somaliland and the programme got underway in mid-2002.

The limited engagement of international actors in livestock services has been attributed by participants in the study to the following factors:

- External agencies believe that the livestock sector potentially generates enough revenue to cover most of the needs of the sector
- International agencies tend to be urban-oriented in service provision
- Lack of effective government to coordinate the activities of international agencies

Officials of the Ministry of Livestock tend to question the role of international agencies in Somaliland. One ministry official has stated:

I believe that they are a major constraint that hasn't allowed us to come up with our own solutions, strategies and policies. Their behaviour and attitude is anti-institutional and it seems somehow that they are allergic to the existing institutions or framework as they always try to find a way to evade co-operating with the existing system. They try to create parallel systems that compete with the government. For example, in terms of livestock policy, we chose to give greater role the private sector in animal treatment and drug importation. Since the internationals have the funds and the money they have not concentrated efforts on these two issues. They have been hiding (as if they are doing something suspicious) behind animal health service delivery, which is a huge system, by providing small training to veterinarians and drug importers.

³⁶ This is extremely low, the annual budgets of such organisation is about US\$ 200,000/=

It is unclear in what way the limited activities of a handful of NGOs could present a “major constraint” to the development of such a vast sector, but the above comment illustrates the orientation towards strong government control that persists within the ministry. Many government officials would prefer to have direct control over the activities of international NGOs, in part because they feel that aid resources are being diverted to the private sector. For their part, international NGOs have resisted government attempts to control them and, with their meagre inputs, continue to provide support the private sector. Workshop participants suggested that international agencies are reluctant to provide direct assistance such as free drugs because they see such a move hinders the process of privatisation, which is a government policy they claim to support.

Workshop participants complained that there is no government livestock health care policy pertaining to the activities and role of the international agencies or that coordinates their activities. Because of this lack of government guidance, many participants believe that international agencies lack a clear strategy and do not spend their resources according to Somaliland’s priorities. For example, NGOs have built animal health centres in pastoral areas, whose utility is questioned by the intended beneficiaries. In Togdheer region UNHCR and the Danish Refugee Committee have built seven such centres.

Participants in the study generally agreed that a long term and co-ordinated engagement by international agencies in the sector could achieve greater impact, without creating external dependency. In particular, they felt that the aim of international actors should be to strengthen government capacity to regulate the sector, while at the same time encouraging the development of the private sector and community-based animal health services.

Drug Vendors

Never before in the history of Somaliland have pastoralists had access to so many varieties of veterinary drugs from such diverse origins. Pharmaceuticals drugs can be found in every corner of Somaliland from nomadic hamlets to the big towns. They are being sold at affordable prices by street vendors, shops, pharmacies, and at animal water points. The lack of regulation has led to this growth in the drug trade in Somaliland and has alleviated the problem of scarcity of drugs. However, there have been problems associated with the expansion the trade and workshop participants identified a number of key concerns.

First, most of the people who are involved in the import and sale of livestock drugs have little or no background in veterinary science. Some import prohibited, expired and low quality drugs.³⁷ Drugs are often inappropriately handled and stored. All this undermines those honest traders who want to trade in good quality drugs. In the words of a drug importer:

I am in the business of trading in livestock drugs. I import one of the best quality drugs the market can offer (a European brand), and I do it with the consultation of

³⁷ Participants were particularly concerned about the quality of drugs imported from developing countries like India and Pakistan.

a veterinary expert. The problem I encounter is veterinarians who have the knowledge but not the money to buy the drugs. Therefore, we can only sell the drugs to those who can afford them. We face strong competition from cheaper and lower quality drugs from Pakistan and India. Therefore, it is very difficult to continue to import the more expensive, good quality drugs.

Second, drug traders are importing many brands from many different countries, and there is no mechanism to check which drugs are appropriate for Somaliland's animals. Some of those imported are not even approved for use in the country of manufacture.

Third, the drug traders have no formal relationship with other key actors in the sector. Some international NGOs do provide training for key drug vendors, and some of the drug importers do seek the advice of professional veterinarians. The relationship between drug importers and the government, however, begins and ends with the acquisition of a license. Drug vendors are, by definition, primarily concerned with making a profit, not with the general welfare of the animals.

One way to make drug trading safer and more responsive to local needs might be to encourage professional veterinarians to get involved in the import of essential drugs. VetAid has proposed a sort of 'revolving fund' scheme, in which drugs would be supplied to these professionals and the income from sales would be used to import additional drugs and other medications. A more conventional solution might simply involve the tightening of controls on drug importation and sales, and on the licensing of drug vendors.

Pastoralists

Under the previous government, the provision of animal health services to pastoralists was either free of charge or highly subsidised. Government controlled the distribution of veterinary drugs and essential drugs were, in theory, provided free of charge. In practice, the pastoralists had to pay or use unofficial channels to access these public services, while being cognisant that these services and drugs were supposed to be free. Such practices led to a degree of mistrust between livestock owners and the veterinary service providers that still prevails and hinders the provision of private veterinary services. Although free distribution has been discontinued, pastoralists remain reluctant to pay for the drugs and services provided by the private veterinarians. A major challenge for private veterinarians will be to win back the trust of the nomads (WSP, 2000).

In the absence of formal animal health care services, many herders have taken to buying drugs from petty traders or village stores and treating their animals themselves, without consulting a veterinarian. As most pastoralists are illiterate they have difficulty in understanding the instructions for administering medication and are therefore likely to misuse the drugs. Sometime they may use one disposable syringe for treating hundred heads of animals, and rather than curing the animal they spread the disease. They may also treat the animals in the same place without separating the sick from the healthy. In the absence of a functional ministry or private veterinarians the pastoralists have no place to turn for help. Not surprisingly, in light of previous experience, they regard public and private veterinary professionals as opportunists who have no concern for the welfare of the pastoralists or their herds.

Deregulation has led to a reduction in the price of drugs. Workshop participants stated that the price of one animal could cover the medical costs of one hundred and fifty heads of livestock. However, the health of animals has to compete with other needs, some of which (among them *qaad*) outweigh the expenditure on animal health. It seems that when it comes to a choice between long term animal health needs and short term material or daily domestic needs, the rational imperative for an individual pastoralist is to forsake the long term benefits of animal health.

In general, Somali pastoralists possess a detailed knowledge about their environment and livestock and indigenous animal health and husbandry practices are well described in the literature (Mares, 1954 and Edelsten, 1995). Although there is no information on the impact of modern veterinary service delivery on traditional know-how, there is a perception that the availability of drugs led to a drastic reduction in the use of traditional healing.

Some workshop participants argued that greater participation of pastoralists in reform of the livestock sector is a prerequisite for more appropriate animal health services. Pastoralists should no longer be seen as objects upon which development is to be practiced, but rather as credible partners with vested interests in the well-being of their animals and with important intellectual contributions to make.

In addition to increasing the pastoralists' level of participation, the development of their knowledge, abilities and skills, through direct training and education, is another prerequisite to viable animal health services. Such developments would enhance their capacity to carry out important veterinary duties on their own, and could also improve animal health by reducing the misuse of veterinary drugs.

Law and Regulation

Veterinary legislation enacted by the previous government was designed to cater for the public sector animal health services and did not make provision for private veterinary practice. The Ministry of Livestock in Somaliland was established at a time when state veterinary services had collapsed. State veterinarians in the government today fulfil a more limited number of public functions with many activities delegated to the private sector (RWA International, 2000). It is the stated policy of the Somaliland government, that the Ministry of Livestock will no longer have a role in the provision of curative veterinary services (Ibrahim, Undated), and instead will focus on the regulation of private sector activities.

Workshop participants repeatedly stated that there is an urgent need for legislation and regulation of the sector. The increased role of the private sector and lack of effective regulatory measures has led to uncontrolled trade in and abuse of drugs. The lack of an appropriate policy and legislative framework led to undefined roles and responsibilities within the sector. As one participant explained, this creates confusion, breeds misunderstanding and suspicion and a duplication of effort:

Today, we don't know who is what, there are no definite roles and responsibilities right now.

With the primary responsibility for the livestock sector, the Ministry of Livestock is widely expected to take the lead in drafting the new Veterinary Code. A draft Code has been in existence since 1997, but has not yet been forwarded to the parliament. In the meantime, the Ministry of Livestock is applying the Code as though it were already legal. When approved by Parliament, the Code will define the respective roles and responsibilities of private and public sector actors, while laying the foundation for all laws, regulations, and guidelines governing the livestock sector. The drafting was initiated by Vetaid in consultation with various partners. Though copies of the draft law (written English³⁸) were distributed to the lawmakers in 1995, it never made it to the floor of the House and in mid-2002 was under review by the ministry.

Due to the urgent need to regulate drug exports and distribution, the ministry issued a law by ministerial decree regulating the export and sale of animal drugs, which went into effect on 26 February 2000. This decree gives the Ministry of Livestock the right to issue licenses to drug importers and retailers and, with the help of the Ministries of Commerce and Finance, to control drug imports. Stakeholders, including veterinarians and pastoralists, have so far been virtually excluded from the policy-making and legislative processes.

Overall, the livestock sector lacks an effective regulatory framework, depending instead on incomplete legislation, extra-legal ministerial decrees and administrative regulations. Enforcement mechanisms are weak and anyway lack the force of law. Such shortcomings contribute to the poor state of health of Somaliland's livestock and to its exclusion from certain international markets.

Veterinary Regulation as a Constraint to International Trade

Animal health certification is an essential regulatory requirement in international livestock trade. Before animals are shipped out of a country, the exporting country normally issues an export permit and a health certificate to accompany the shipment (EC/FAO, 1995). Health certification in the international livestock trade is strictly enforced. In the 1980s, Saudi Arabia first imposed a ban on the import of Somali livestock. Since 1998 the Gulf States have twice imposed embargoes on the on the import of Somali livestock following outbreaks of Rift Valley Fever in Somalia in 1998 and in Saudi Arabia in 2000. The first ban was instituted by Saudi Arabia, Somaliland's main trading partner. The second, which applies to the whole of the Horn of Africa, has been comprehensively implemented by the Gulf States. The economic impact in Somaliland has been severe.

The absence of an effective regulatory framework in Somaliland has undermined international confidence in the quality of Somaliland's veterinary services and the marketability of its livestock. Somaliland lacks measures to control Rift Valley Fever, despite the fact that the first ban for RVF was imposed in 1998. Participants in this study thus felt it was imperative that the Somaliland government make an urgent effort to comply with the procedures and the guidelines set by the Office Internationale des Epizootique (OIE) (see

³⁸ Few of the lawmakers read English

box). Meeting the international standards set by the OIE is the surest way to satisfy the importing countries.

Box 1: OIE Export Guidelines for RVF-infected Countries

The OIE health code provides clear guidelines for the regulation of international trade in livestock to avoid the risk of spreading animal diseases. This code defines an RVF-infected country as one in which Rift Valley Fever has been confirmed during the past three years. Steps must be taken to deal with RVF for three years for export to resume.

There are two options that RVF-infected countries can adopt in order to satisfy importing countries. One is by vaccinating the animals. The other option consists of the following steps:

- Animals must show no clinical signs of RVF on the date of shipment
- Animals were tested for RVF with negative results within 30 days before entry into quarantine.
- Animals were kept in quarantine in the country of origin under official veterinary supervision for 30 days prior to shipment, showing no clinical sign of RVF during that period.
- Animals were tested for RVF with negative result with 14 days after entry into quarantine; and animals were protected from insect vectors during quarantine and transport to the place of shipment.

Some virologists hold that the OIE above guidelines are not realistic and appropriate for sub-Saharan countries. Some guidelines, such as an insect free environment, are impossible for any country to fulfil. What is required are reasonable safeguards and testing between willing exporters and willing consumers.

Source: Terra Nuova 1998

Meeting OIE guidelines, however, is easier said than done. In the words of a veteran veterinarian:

It will be impossible to meet all the requirements set by the OIE. The animal health export standard and guidelines are set by the developing countries, so African Countries rarely meet these standards. Botswana is the only [African] country that meets such standards and can export to Europe and other countries.

The guidelines set by the OIE for RVF infected countries to resume livestock exportation, are also considered unrealistic by many international organisations. FAO (1998) questions the scientific basis of these guidelines and recommends that they be re-examined (Steffen et al., 1998). Furthermore, the overhead costs of implementing either of the options and the guidelines would make unsubsidised livestock export in Somaliland uncompetitive in the international market.

In mid-2002, the Somaliland government submitted an application for membership in the OIE: a first step towards meeting the organization's export standards. However, the admission procedure could be lengthy and political considerations may interfere with the application. Similarly, the government had contacted a major international certification firm with a view to contracting its services at the port of Berbera. While such measures are pending, an interim option might be for the government to take action on FAO's recommendation of calling for the establishment of holding grounds where animal can be held for 21-30 days before export (Steffen et al., 1998). These would be on the route to the main port and in arid or semi-arid areas that are non-receptive to RVF.

Health Services at the Point of Production

A broad range of animal health infrastructure is required at the level of production in order to meet the minimum international standards for livestock export. Somaliland falls severely short of even these basic requirements, which include: transboundary controls and co-operation. There are no transboundary controls for epizootic diseases: pastoralists cross state borders in search of pasture and water for their animals. A disease outbreak in one of these countries can effect the livestock exports for the whole region. Necessary measures include surveillance/early warning, disease prevention and control, vaccination, and laboratory testing

Animal Health in Local Markets

Livestock exported from Somaliland come from throughout the Somali territories and from and Ethiopia.³⁹ These are diverse areas with distinct environments and therefore a potential range of diseases, and cross the borders freely without any health inspection. As most of them pass through the local markets prior to export, the convergence in one place of a lot of stock provides an opportunity for the spread of disease. According to one veterinarian:

Thousands of animals from different regions are assembled in the local markets (*seyladdaba*) for sales on daily bases. These animals, which originate in various regions, are housed together in unattended enclosures, which have been used for years without any cleaning from animal drops and without any form of spraying. Even those animals that have already been bought by dealers are housed in similar conditions. With so many animals together, the ticks and the other parasites that fall from them to the ground threaten to increase the incidence of disease. So what do you expect from animals under such circumstances? It is inconceivable that we could rule out any disease transmission.

Despite the absence of veterinary services the level of disease is generally low, possibly due to the partial resistance of these animals as a result of an immunological adaptation (Heuer, 1992).

³⁹ Informal surveys in Burco local markets by workshop participants showed 60-65% of the livestock originating from outside Somaliland. These figures, however, were disputed by other participants in the study.

Another problem that affects animal welfare is handling. Animals are trucked in lorries from as far away as Dhagax Buur in Ethiopia. There is insufficient space on the lorries for the rough journey that takes at least one day, and the lower deck of the lorry is inaccessible for proper inspection. Sometimes lorries carrying livestock or cattle park for hours along the roads of major cities, towns and villages, without any concern for the welfare of the animals. This type of rough handling causes unwarranted death, physical exhaustion and loss of weight. When the animals are disembarked, conditions in local markets provide little respite, as they offer little in the way of water, shade and forage.

No information is available on the percentage of fatalities associated with poor treatment, so the economic effect on the livestock trade is unclear. Any solutions to this problem will need to incorporate some educational program on the commercial importance of animal welfare. Since local markets are the responsibility of local governments whose revenues derive principally from those markets, it is logical that the local government should shoulder some burden in the provision of services to livestock.

Health Services at the Point of Export

In the pre-war period, animals were quarantined, tested and rested in the hinterland at government holding grounds en route to the exporting port Berbera (Qoolcad at Southeast Hargeysa, Aroori south of Burco, and Haleeya at Hargeisa), where water and shade were abundantly available. These facilities were dismantled during the war, and are no longer operational. Animals now proceed to Berbera without going through any medical check or rest, in difficult travelling conditions. Such conditions are stressful on the animals and skew the results of veterinary testing at the time of export.

At the port of Berbera, most major exporters use their own holding facilities as well as the partially rehabilitated government marshalling yards at the port of Berbera.⁴⁰ About 20% of the 1800 square metre marshalling yards had been rehabilitated by mid-2002. Under the previous government, exporters would use their own yards only when the government marshalling yards were full. One of the advantages of dispersing the animals across these huge holding grounds is that it helps protect the livestock from possible infections (EC/FAO, 1995). Livestock would spend two days for shoats, and fourteen days for cattle in the marshalling yards before shipping. According to a government veterinarian, “The main reason for the disuse of the public facility is because the partially rehabilitated portion is not yet suitable to handle any of the species.” In the private-holding grounds, there is no formal mechanism for safeguarding animals from infections.

At these private-holding yards the government first verifies and records the number of animals, date of arrival and their origin. There is a mandatory two-day rest. Water and forage needed for each animal is then specified for the dealer. Certified private veterinarians carry out a Brucella test for each animal. Animals that test positive and those with visible

⁴⁰ Berbera holding grounds and marshalling were good condition in 1991, but the 1992 civil war destroyed them. ICRC, EU, UNHCR and COOPI have since partially rehabilitated the marshalling yards, installing water tanks and troughs, a small lab, and an office.

physical marks are identified and removed by the government doctors. The remaining number is recorded so that on loading, the number of animals matches the recorded number.

The Ministry of Livestock charges about So.Sh. 10 per head for its services, well below the charges of private agencies. One participant in the study complained:

The ministry that does most of the work, when it comes to livestock charges receives the least. Veterinarians from the ministry conduct medical check ups, count and record the animals and sometimes they work late hours without overtime pay.

Since every exporter is using his own yards, which are dispersed around Berbera, it makes it difficult for government veterinarians to monitor closely what is going on in these holding grounds. The government veterinarians do not have the resources and the means to monitor and enforce testing procedures.

Brucella Testing

Decisions on which of the listed OIE regulations to observe is left to individual countries. The Kingdom of Saudi Arabia, which is the leading importer of Somali livestock, appears to place special emphasis on the enforcement of regulations pertaining to brucellosis. Therefore, Brucella serology has become the centre-piece of the health certification program for the livestock export trade in Somaliland.

Brucella testing in Somaliland, exceptionally, is reasonably efficient and reliable in meeting the required regulations. Each year millions of heads of stock are tested and the rejection rate among those exported to Saudi Arabia is comparable to other countries with more modern facilities. In 1994 only 1.28% of animals exported from Berbera were rejected (EC-FAO, 1995). One of the private associations that provides services for the biggest livestock dealers tested from 350,000 heads between mid January and March 2000. Of these, 12,500 heads were rejected – a refusal rate of 3.5%.

Table Animals Checked for Brucellosis, January-June 20001

Month	Shoats Exported	Camels Exported	Shoats rejected	Camels rejected	Percentage of the total
June 99	202,801	3,746	6,500		3%
July 99	202,801	6,992			0%
Aug 99	198,983	6,055		649	0.3%
Sept 99	142,056	3,076	5,500	486	4%
Oct 99	215,079	3,189	11,868		5%
Nov 99	248,611	3,536	5,140		2%

Dec 99	249,039	6,044	11,700		4%
	1,459,370	32,638	40,708	1,135	2.8%

Source: [The Ministry of Livestock, 1999

As indicated by the above table, 2.8% of total livestock exports were rejected in the second of half of 1999, which coincides with the period when the livestock ban was not in effect. Not all of these rejections are due to positive testing for brucellosis. There were other reasons such physical lesions or bruises and reasons not related to animal health (EC/FAO, 1995).

The efficiency and reliability of the Brucella testing stems from the fact that all the testing for export animals is done by private veterinary associations. First, private veterinary agents can afford to employ qualified professionals around the clock to do testing. Second, all animals are tested for Brucella, thus substantially minimising the risks posed by random testing or sampling. Third, agents take the testing seriously, because excessive animal rejection would tarnish the reputation of their respective associations. A chairman of one of the private associations explains:

When it comes to medical issues we don't comprise because our reputation is on the line. We don't get pressure from the livestock dealers with regard to testing procedures, as they too don't want to take any risk. They might pressure us from payment side, as there is nothing like a labour union that can defend our rights.

The success of Somaliland's Brucella testing is somewhat surprising given the circumstances. Most testing is conducted in makeshift facilities without the benefit of a permanent laboratory. Competition between the private associations and the pressures on them from powerful livestock dealers encourage irregularities in procedures and testing standards. Finally, there is a lack of an effective regulatory or monitoring body (whether government or international) with direct control over the testing of these private associations.

Other Essential Services

In addition to veterinary services, there are other essential services, such as shipping, water, forage and shades in the marshalling yards and on the ships, which contribute to the well being of the animals. These services are regrettably inadequate.

Water

The water system in Berbera, which is partially rehabilitated, has its outlets mainly concentrated in and around the old government marshalling yards. The watering points do not reach the private marshalling yards that are scattered elsewhere around the town. The traders either drive the herds on foot to these outlets or haul water to their animals by tanker. The latter is an expensive practice and a burden to the traders.

Shade

The most acute and visible problem at Berbera is the lack of shade: a problem that is most pronounced in the hot months of May to September. During these months thousands of animals huddle under trees or flimsy structures covered with grass. The traders find it financially difficult to provide sufficient shading over such a wide area and strong summer winds often dislodge the grass coverings.

Forage

Fodder is brought to Berbera by trucks from the hinterland. Fodder vendors offer various kinds of fodder with different price tags. Some of this fodder is not sufficiently nutritious for the animals, and some traders do not give their animals sufficient quantities, in an effort to reduce costs.

Shipping

Currently, livestock have to walk about three or four kilometres in the few hours before loading. But that journey is longer necessary as the marshalling yards at the port have been rehabilitated by UNHCR. The yards are used to give the animals a final physical check up and more than half a day's rest before shipping.

In recent years, there has been some improvement in shipping. Special livestock carriers are now used for sheep and goats, and to certain extent camels, in place of the dhows and cargo ships that dominated the trade in the early 1990s. "Compared with what we have started with in terms of shipping livestock," said one participant, "we have covered a lot of ground."

None of these ships are insured, however, and non-of them are the row-row ('walk-on, walk off') type that can easily carry camels and cattle. Camels and cattle are therefore loaded onto the ships by cranes and ropes, which is tedious process and stresses the animals. "Certainly when one sees camel or bull being lifted up about 50 meter into the air and screaming, it is a horrible sight," said an Egyptian veterinarian. "If the animal rights groups were around they would have protested." Furthermore, many of these ships are old and not seaworthy. "The port authority shouldn't have allowed such ships to dock. These officials are not enforcing maritime laws," complained the agent of a shipping company.

However, according to a government veterinarian in Berbera, before the final certification is issued the carrying capacity of the ship is specified and its ventilation is checked. Water, forage and the number of animal attendants required for the voyage is also specified. Despite these controls, insufficient ventilation, inadequate water, space and forage, and inexperienced livestock attendants are common.

Government officials argue that the responsibility for ensuring adequate conditions for the animals on board ship should lie with the traders. As one Berbera port official argues:

What can you do if the traders want to risk their animals, by overcrowding the animals, and by shipping them without enough water, forage and with inexperienced watchmen who are his close kinsmen assisted by the trader?

6

Conclusion and Recommendations

The workshops produced numerous recommendations on all three themes. Among these the following key policy recommendations have been distilled by the study.

Overall Policy, Strategy and Legislation

The central government should guide the overall policy and strategic framework for the livestock sector in Somaliland. In order to ensure that policies respond to the changing nature of the sector and the needs of various stakeholders, it is recommended that the policy-formulation process be as consultative as possible.

In addition, the existing policy and legislative framework could be strengthened in the following ways:

- Existing draft legislation should be submitted to parliament for review, amendment and approval with the least possible delay
- Ministerial decrees should be drafted as legislation and submitted to parliament or declared void within an agreed time frame
- A multi-stakeholder task force, under the joint leadership of the concerned ministries and the appropriate parliamentary sub-committee, should be charged with preparing essential legislation in support of the national strategy as soon as possible

Ministry of Environment and Rural Development

The ministry should take the lead in developing a strategy for sustainable pastoral resource management in Somaliland that addresses the following issues:

- economic and social development in pastoral areas
- rangeland use and ownership
- water supply and its environmental side-effects
- numbers of livestock
- carrying capacity of rangeland
- drought prevention and preparedness

- extension and research

Ministry of Livestock

The Ministry of Livestock should formulate a clear policy that defines the role, responsibility and jurisdiction of all actors involved in the sector

The draft Veterinary Code should be legalised by the Somaliland parliament, because establishes the legal basis for cooperation and professionalism for those involved in the sector.

A law governing drug importation, distribution and treatment and penalising violators should be introduced.

Public Awareness and Participation

In practice, pastoralists have been little involved in the formulation of development policies and the related programs or projects that affect their lives. Somali pastoralists occupy a peripheral social, economic and administrative position and have little political weight. An IUCN study on several communities in Somaliland in 1999-2000 found that in all pastoralists and other resources users are the furthest from the decision-making power and authority. Therefore, policies and program should be based on wider participation from the pastoral community.

Consultation should be complemented by a long-term public campaign to raise awareness at all levels including local communities, the administration, regional and international institutions about changes in the natural environment and the importance of dealing with them.

These measures would involve:

- Establishing local councils at the district level in accordance with the Constitution and other relevant legislation
- Consultation with local officials, rural elders, religious leaders and other sectors of society in the formulation of new policy or legislation pertaining to rangeland management, land use etc.
- Increased women's participation in decision-making at all levels
- A public awareness campaign about pastoral and environmental issues, involving the media, field projects, seminars and workshops throughout Somaliland and outside the country

Recommendations for regulating pastoral environment and livestock trade

Preserving the pastoral environment

The continued deterioration of Somaliland's pastoral environment threatens a national crisis. If allowed to continue, the consequences are potentially far reaching: the increasing poverty of the rural, pastoralist population, expanding migration from rural to urban areas, the erosion of the sustainability of Somaliland's principal export resource (its livestock), and long-term environmental damage. Arresting and reversing the degradation of the pastoral environment should be a national priority of the first order.

In accordance with the constitutional principal of decentralization, the government should empower local communities to establish institutions giving them greater control over their land, the ability to settle conflicts, raise taxes, manage natural resources and organise the marketing of livestock and animals products.

For immediate action, it is proposed that a national task force should be set up, under the leaderships of the government comprising public officials, local community leaders, professionals and concerned citizens. The task force would be responsible for development of a plan of action intended to:

- Implement existing policies and regulations with some modifications to accommodate recent developments.
- Enforcement of the ban on charcoal exports, improvement of production methods, reduction of wood-fuel consumption and investigation of alternative energy sources.
- Stop the unregulated expansion of all enclosures, settlements, tracks, water points and charcoal production sites;
- Eradicate illegal enclosures or settlements, especially located in sensitive/marginal areas;
- Propose consolidation of certain settlements and water points;
- Organize an awareness campaign on the value and the importance of the pastoral environment to our livelihood;
- Tree plantation⁴¹ efforts throughout the country by planting Sudan grasses and Lucina tree, which can grow fast and creating a national tree-planting day

⁴¹ Danish Refugee Council (DRC) is preparing hundreds of Bamboo tree to be distributed to the farmers in Somaliland to plant them on the dry-river banks to stop bank erosion

Economic and Development in Pastoral Areas

Political marginalisation, lack of economic opportunities and rural infrastructures, harsh climatic conditions and the association of pastoral lifestyle with backwardness have been contributing factors in the underdevelopment of Somaliland's pastoral areas. The consequences of this underdevelopment have been the scarcity of opportunities in pastoral communities, a growing economic and social disparity between rural and urban areas, and a steady out-migration from rural areas to major settlements and towns. Rural out-migration is both a cause and a symptom of the declining productivity of the pastoral economy.

Promotion of development in pastoral areas could take the following forms:

- Assigning priority to the extension of essential (human) services – education, health, water – to rural and areas, in a way specifically adapted to the needs of pastoral communities
- Educating the public (both urban rural) on the social and economic value of pastoralism
- Decrease the pressure on the pastoral environment by promoting economic diversification (see diversification)
- Encouraging the domestic marketability of local animal by-products by discouraging the import of animal by-products.
- Increasing public private investment in the pastoral sector in the longer run through building basic infrastructures and providing financial assistance
- Enhancing and developing local knowledge and traditional practices by incorporating into rural education programmes

Land tenure reform

Another possibility for reducing the pressure on pastoral environment is to take make structural changes to the pastoral economy, such as land tenure reform, or a limit on the number of animals per household. Such changes will require long term planning, within the framework of a system sustainable pastoral production. The aim of such a system should be a balanced relationship between people, livestock, water and rangeland, transhumant grazing, and common property regime for water resources. Such a system would need to include measures for:

- Zoning regulations for controlling settlements and private enclosures
 - Consolidation of existing enclosures and elimination of illicit or harmful enclosures
-

- Restoration of grazing and forest reservation, seasonal reservations, natural reservations and reservations for endangered species
- Stabilising water points by using the existing laws as an interim measure and then developing comprehensive plan, which is in tune with the current trends

Livestock Trade, diversification and Marketing

Domestic livestock trade

To make domestic livestock markets in Somaliland more efficient, an effective system of local government administration that regulates the market and provides essential public services is needed. Domestic trade management at the local level should be consistent with policies and objectives at the national level.

The municipal authorities should take a leading role in promoting and creating an enabling environment for domestic livestock trade development. This will require the establishment, together with the help of central government, of effective local institutions with accountable systems and a sufficient capacity to:

- formulate, execute, and maintain policies and programs
- enforce necessary rules and regulations
- collect taxes, user charges, fines and cost sharing
- establish slaughterhouses and milk markets with the essential facilities
- license local financial institutions and other institutions that provide savings, credit, incentives to the producers and property rights
- issue licenses and permits.

Livestock export trade

With so many competing individual interests, participants believed that no one is in a better position to regulate these competing interests other than the government. However, participants in the study that government interventions should be only formulated and implemented in close co-operation with the relevant actors in the sector. Priority actions for the government would include:

- immediate regulation of the flow of animals being exported with a view to eliminating livestock dumping
- development of a comprehensive policy to guide the sector
- preparation of new regulation and enforcement of existing laws

- establishment of a commercial bank in collaboration with an international bank
- reduction of export taxes and other charges

Product Diversification

Diversification should take two forms:

1. Development of new [non-pastoral] economic resources and sectors
2. Diversification of pastoral products and markets

One obvious way to relieve some of the pressure on the pastoral resources would be to shift some of these people into other productive sectors such as fisheries, frankincense, salt and minerals, but the problem is how. Moreover, meeting the cost of such activities and winning the trust and acceptance of the pastoralist community will not be easy. However, a strategy by the government that gives a priority to:

- Provision of basic human services and essential infrastructure to encourage movement to the coastal areas
- Provide support for the voluntary migration of pastoralists to coastal areas, and assistance for those who seek to engage in fishing
- Diversification of the livestock trade will demand greater domestic processing and an aggressive international marketing strategy. To achieve this will require leadership of the government collaborating with the chamber of commerce.
- Government should encourage the development of domestic processing plant for chilled meat and hides for export, by offering credits, tax breaks and free land for construction
- Periodic inspections- by government inspectors and international experts of Somalia/Somaliland chilled meat processing infrastructure and procedures and submitting the report to the relevant authorities in the exporting countries
- Technical support to the private sector in facilitating chilled meat so that international standards are met
- Provide an environment that encourages foreign investment in this sector and that safeguards this investment

Required from private sector actors

Private sector actors should bear much of the responsibility for developing structures that are effective and efficient are crucial for the development of the domestic livestock and animal products trade. Some of the structures and steps that are needed include:

- production, domestic trade and service provider associations that promote and protect private sector interests
- compliance with local regulations and payment of taxes
- establishment of slaughterhouses for processing for animal products
- specialized marketing boards

The participants heavily criticized the conduct of the current livestock exporters. They accused the big exporters of being uninterested in the physical well-being of the animals or national interest, but only in profit. A more responsible attitude on the part of exporters will be critical to reform of the sector.

Exporters should be required to:

- comply with government regulations
- re-establish the livestock export committee⁴²
- co-operate with the Chamber of Commerce

Required from the chamber of commerce

The chamber of commerce of Somaliland has a key role to play in reform and regulation of the export livestock trade. The Chamber should:

- raise awareness among exporters about the role of the Chamber of Commerce and its ability to serve them.
- co-operate actively with the government in the formulation and implementation of livestock trade regulation
- take a lead role in encouraging self-regulation within the sector

Required from international aid agencies

Despite the central role that livestock trade plays in the reconstruction and well-being of the people in Somaliland, the contribution of donor agencies to the promotion of livestock trade has been virtually zero. The engagement of the aid agencies in the sector would contribute to the country's development, and the nation's food security and socio-economic wealth. Donors therefore should take a more active role in the development of Somaliland's livestock trade by:

⁴² This committee has been re-established under the auspices of the Somaliland Chamber of Commerce.

- providing diplomatic support for lifting the livestock ban
- helping to establish financial institutions offering credit and other financial services to traders and producers
- assisting in strengthening government regulation of the sector
- providing technical assistance in order that Somaliland meet international standards for export of livestock
- sponsoring Somaliland missions and delegations to explore other markets and to improve relations with the existing ones;
- providing funds or credit for construction of livestock abattoirs;
- assisting in the establishment of export certification measures
- assisting in the provision of basic human services in the pastoral areas and giving the priority to the pastoral areas

Required from the government and chamber of commerce

The Ministry of Commerce and the Chamber of Commerce should take the lead, in consultation with export traders to:

- Work with the international bodies towards the lifting of the Saudi ban
- Develop effective marketing strategies and techniques such as promoting Somaliland livestock through film advertisements, billboards, procurers and trade exhibitions
- Continue to explore other livestock markets as they have been during the ban by inviting potential buyers and sending delegations to livestock importers;
- Hold seminars and workshop to strengthen the relationship between the exporters, and to increase their knowledge about marketing techniques and collect information about the international markets to the exporters;
- Continue with their efforts to lift the ban and continue to look for other viable alternative markets by sponsoring missions to the Gulf States.

Recommendations for improving export animal health services

Participants in the study agreed that it is virtually impossible for Somaliland to meet all the international regulatory requirements set by OIE, let alone re-establish some of the basic infrastructure for animal health services for export animals in the near future. They recognised that there is a need to develop a comprehensive strategy for re-establishing the basic infrastructure and health services for export animals. Moreover, special problems are

associated with the provision of animal health services in pastoral areas. This include nomadic and transhumant movement of livestock, poor infrastructure, difficult terrain and isolation. So, there is no proven and sustainable model that has been developed, though there is a call for developing community-based animal health services. Towards this end, the recommendations proposed by the participants include:

General

- Pastoralists should be trained in basic animal health treatment and their awareness should be increased of the adverse effect of incorrect usage of veterinary drugs, such public awareness can be done at the local markets, Friday prayers, and social gathering.
- Greater pastoral participation in animal health service delivery both the government and International should involved the herd owners through community-based programs and especially the Ministry should encourage and facilitated International NGOs to work with local communities as well as with the private veterinarians and government should contract its services to the private sector
- Both the government and the international NGOs involved in the sector should encourage and promote greater interaction and accessibility between veterinary professional and development of permanent veterinary posts.
- Traditional livestock treatment methods that are safe and useful should be promoted and studied.
- In the long term, an institution for livestock research and training, including skills development for veterinary professionals, should be established.
- The central government should spend 1\$ from the \$3.5 export tax on every head of livestock on the animal health sector.
- Both the government and its international partners should encourage and facilitate the exporters to reinvest some of their profits in the sector.

In Pastoral Areas and at Local Markets

- Creating a centre for vaccination and conduct regular livestock vaccination campaigns
- International NGOs and the government should assist veterinarians (aspiring local practitioners to go back in their respective areas) in establishing private health services including diagnosis unit clinical services in the pastoral areas.
- Animal health posts should be established funded by local government with the help of international agencies and the private sector in local markets in order to ensure

that basic health standards are met, to provide preventative measures for the control of disease, and to contribute to early warning and emergency response mechanisms.

- Expanding private mobile veterinarians, as there are already some private veterinarians who are engaged in such activities. Scheme similar to that of Somaliland Road Authority.

Laboratory services

- The central government should re-establish regional veterinary laboratories
- Improve brucella testing procedures, specifically
 - train veterinarians on standard brucellosis testing procedures
 - build proper facilities for testing
 - establish a license panel composed of a representative from an international agency, the government, livestock traders and veterinarian associations, so that it has credibility with the importers
- Spray animals at the border points

At the port of exit

- Government regulation and monitoring should be strengthened concerning access to sufficient water, forage and health services on land and on the ship.
- Public and private marshalling yards should have sufficient shade.⁴³
- Make Berbera a disease free zone and enforce a minimum short-term quarantine (of 24 hours) prior to export; ideally, quarantine measures should be sufficient to reducing the risk of RVF “to acceptable levels” in keeping with UNDP and FAO proposals (IRIN, April 3, 2001)
- Establishment of a mechanism for the “certification” of export to comply with international standards
- International maritime law should be enforced by Somaliland’s port authorities, so that seaworthy and suitable livestock carriers for all species are used for export livestock and so that there are experienced attendants to accompany the animals on their journey.

⁴³ A simple, permanent solution might be to grow shade trees in Berbera. (EC/FAO, 1995)

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