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Sustainable Pastoral Production System Under Pressure: - A case study of Somaliland's pastoral production system

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Abstract

Livestock husbandry is the dominant system of production in Somaliland. Close to half of the population is involved and government revenue is heavily dependent on livestock exports. The production system has gone through a transformation from being self-sustaining to a market oriented production system. The increase of livestock export has led to wealth accumulation that has made investment possible in improving the recurrent problems with finding water and pasture. But over time such improvements also have brought pressure on the pastoral environment. Around the water points, new settlements have emerged, while illegal enclosures have started to disrupt the age-old pastoral migration between wet and dry season. The Somali state development policies, land reform programmes in particular, have further added to the problem by disturbing the pastoral tenure system, which governs the commons. This paper describes the pastoral mode of production, as it was prior to external influences, such as colonialism, market economy and state development policies. It further describes the transformation of the production system and the impact such changes have on the pastoral environment and the pastoral tenure system. The study discusses and concludes the necessity of reviving the traditional pastoral tenure system and its method of managing the commons, which previously made the pastoral sector sustainable.

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List of Abbreviations

GOS Government of Somaliland

IRIN Integrated Regional Information Networks

NFD Northern Frontier District

NGO Non Governmental Organisation

RVF Rift Valley Fever

SNM Somali National Movement

UNHCR United Nation High Commissioner for Refugees

UNDP United Nations Development Programme

USC United Somali Congress

Glossary

Guban Guban is the first of the three topographical zones of Somaliland.

It is a narrow coastal region with temperatures exceeding 40c

during the summer season.

Ogo The Ogo zone possesses rich supply of underground water, which

together with its mild climate has encouraged settlement and

development. The Ogo is also where most of the major

Somaliland's towns are located

Haud The Haud zone stretches across the border from Somaliland into

Ethiopia. It has rich in pasture, but has no permanent water sources

(this is true before 1960).

Berked Berkeds are cemented water halls that harvest rainwater or

preserve water that are bought from the open market.

Shir It is the temporary meeting that the clan elders call upon to discuss

the issues affecting the pastoralists.

Xeer What is agreed upon (at the Shir) becomes the traditional law

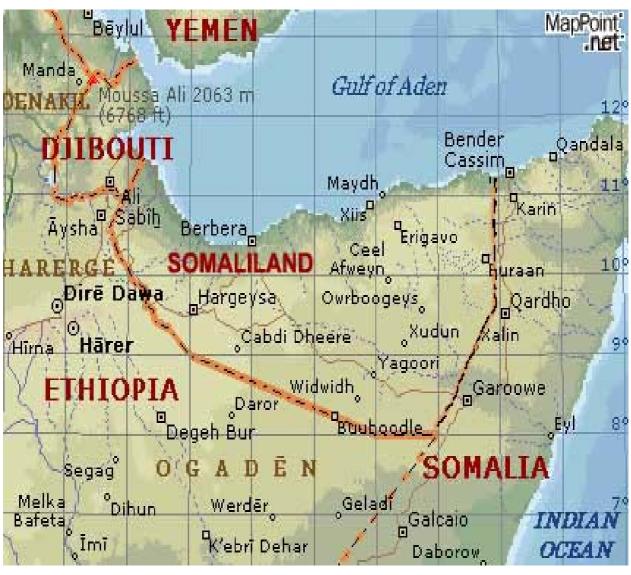
called "Xeer". The "Xeer" is the prevailing law, until further Shir

decide otherwise

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Figure 1. MAP OF SOMALILAND



1. Introduction

Pastoralism, in one form or another, is the primary production system in Somaliland. Over half the population of Somaliland is involved in some form of animal husbandry, and government revenue is heavily dependent on livestock exports. For nomadic pastoralists the best protection against unreliable rainfall is access to extensive territory containing pasture and water. As with other pastoral systems in Africa, mobility and flexibility are required to make good use of scarce grazing range resources in Somaliland. In ecologically fragile arid environments, such an arrangement is important in preventing land degradation and ensuring long-term productivity of range resources. However the arrival of the British in the late 19th century brought profound changes to the production system by establishing the basis for Somaliland's livestock export economy. The pastoralist economy was further integrated into the market as result of the oil boom of the Gulf States. The trade established a wealthy class of livestock traders and urban-based nomads, who dominated livestock exports and often pursued their own interest at the expense of pastoral group interest. They invested in building wells and other water points and fodder production. These improvements alleviated the recurrent problems with finding water and pasture, but over time also brought unprecedented pressure on the pastoral environment. Around the water points, new settlements emerged, while enclosures started to disrupt the age-old pastoral migration between wet and dry season. When grazing patterns become restricted, the result can be land degradation, sedentarisation, livestock reduction and conflict. The state development policies further added to the problem of land degradation, in addition to marginalizing pastoralists.

1.1 Purpose and questions

The purpose of this study is to highlight the overall effects of the transformation of the pastoral production system in Somaliland. In particular, I will focus on the changes brought on by the market economy and the state developmental policies. My two research questions are:

- What impact does the state tenure system have on the cohesion and social structure of the pastoralists?
- What impact does the proliferation of water-points, human settlements and enclosures have on the fragile pastoral environment?

1.2 Method and material

I have divided the study into three stages. In the first the stage I describe the pastoral mode of production as it was prior to external influences. The second stage describes the transformation of the production and the changes it has gone through. The last stage describes the effects of the external influences (colonial, market economy, state interventions). With regard to the choice of literature, the study is based on analysis of secondary material. I have used books and other published materials on the subject. Some of the well-known writers on this subject, used in this study, are Said S. Samatar, Ehlers & Witzke and I. M. Lewis. Lewis, an English social anthropologist, not only goes into great length in describing Somaliland's pastoral mode of life, but also writes about the contemporary political history of the Somalis. I have had some difficulties, though, in finding material regarding the years 1980-90, and I suspect that a lot of irreplaceable literature, written in Somali and English, was lost during the civil war. For the 90s, during which Somaliland proclaimed independence, I have found and used some studies published by Somali scholars and NGO's working in the country.

1.3 Plan of the thesis

This thesis is divided into six chapters. This introduction is followed by an overview of Somaliland's history and economy. The reason for this is that very few people know about Somaliland's turbulent history or its current state. Although I tried to the best of my ability to shorten this part, I couldn't further reduce it and at the same time give the reader some overall understanding of the country. In chapter three, I explain the pastoral production system and in chapter four, I outline the transformation of the pastoral production system as it shifted from being self-sustaining to becoming market oriented and integrated into the world market. The main pressure factors on pastoral environment, resulting from the livestock trade, are discussed in chapter five and further analysed in chapter six.

2. Somaliland history *The land and the people*

Somaliland comprises of the territory, boundaries and people of the former British Somaliland Protectorate. Somaliland extends southwards to Ethiopia, Djibouti to the west and Somalia to the east. Within these borders, Somaliland's territory covers an area of 137, 600 square kilometres (GOS, 1999). The inhabitants are ethnic Somalis, united by race, language, religion (Sunni Islam) and culture, which they share with the Somali inhabitants of neighbouring states. Population estimates vary between 2-3 million inhabitants. Somaliland's inhabitants also identify themselves with various clans and sub-clans, as including the Isaq, Gadabursi, Issa, Dulbahante, and Warsangeli clans (GOS, 1999). Mainly the Issa and Gadabursi clans inhabit the west. The Isaq chiefly settle the central regions while Warsangeli and Dulbahante clans settle in the eastern regions (GOS, 1999).

Political history

As in other parts of Africa, Somaliland was created by the partition of the horn Africa by Britain, Italy and France, and the Abyssinian Empire. Somaliland become under the British administration and its interest in Somaliland originated from her possession of Aden (Yemen), which had been taken over by force in 1839 as a trade station on the short route to India (Lewis 2002: 40). The British discovered early on that Somaliland had a potential as a source of fresh meat for the British garrison in Aden. To achieve this objective the British entered into a series of agreements with the traditional leaders of the clans of the area, but the peaceful takeover lasted only for a few years (Lewis, 2002: 45-49; Jama, 2003: 38-39). In 1899, they were confronted with an uprising led by a local religious leader, called Sayid Mohammed Abdulle Hasan (Lewis, 2002:79; Jama, 2003: 56-58). The movement engaged the British in bloody war for two decades, until it was finally defeated in 1920 (Lewis, 2002:79; Jama, 2003: 59).

From independence to unification

In the worldwide wave of anti-colonial sentiment after the Second World War, the call for independence also reached Somaliland and June 26 1960, Somaliland was granted independence. Somaliland united with Somalia to form a single state in July 1960 (Lewis, 2002:80; Samatar, 1991: 6). This came only after four days of independence, as the people of Somaliland were eager to reunite with their brothers in the south. The other missing parts, apart from Somaliland and Somalia, were the Somali-inhabited regions of Ethiopia (Ogaden),

the French Somaliland (Djibouti) and Kenya's Northern Frontier District (NFD). Politically, Somaliland entered the union at a disadvantage. Somaliland was allocated only 33 seats in parliament versus 99 for Somalia and the capital, the parliament and almost all the institutions of the new state ended up in Mogadishu in the south (Lewis, 2002: 83-5).

From unification to civil war

The unification of Somaliland and Somalia had been based on a policy of *Pan-Somalia*, but the first blow to that dream came when the British awarded independence to Kenya, including NFD in 1963 (Lewis, 2002: 191-2; Samatar, 1991: 16). Apart from this setback to Pan-Somalia, the new republic itself was soon in difficulty at home. During a brief period of parliamentary civilian rule (1960-1969), the country's experiment with western democracy proved poorly adapted to the clan-based nature of Somali politics, and was soon corrupted. Against a backdrop of growing popular discontent, President Abdirashid Ali Sharmarke was assassinated by one of his bodyguards while touring the Las Anod area (Somaliland district) (Samatar, 1991: 17). One week later on October 21, 1969 the army commander, General Mohamed Siyad Barre, seized power in a bloodless coup (Lewis, 2002: 206). As the support for his revolution began to fade in the mid-1970s, Barre turned to the *Pan-Somali* dream to revive his declining support base. With the help of the Soviet Union, Barre equipped and trained a Somali army and launched an attack on the Ethiopian army in 1977(Samatar, 1991: 17). In order to incorporate to the socialist system, the Soviet Union withdrew its support from Barre and sided with the Ethiopians, the tide began to turn forcing the Somali army to withdraw (Lewis, 2002: 231-39; Samatar, 1991: 18). Somalia's defeat buried the dream of a Pan-Somali state – as Djibouti's in a referendum in 1977, chose to be independent rather than to join in a union with the Somali Republic.

The defeat also sowed the seeds of mistrust between the north and the south. But the single most damaging in relations between North and South was the refugees to Somalia generated by the war. Most of the refugees were Ogaden Somalis, a group non-resident in the North, and whose political leadership was associated with the Barre regime (Lewis, 2002: 239-247). The Isaq communities in London formed the rebel Somali National Movement (SNM) and established bases in Ethiopia, from where it waged an armed struggle against the regime's forces in the north (Lewis, 2002:247; Samatar, 1991: 19). In May 1988, following the signature of peace accord between Ethiopia and Somalia that threatened to terminate their campaign, the SNM launched an all-out offensive against government forces in Somaliland.

The Barre government responded with a brutal ground and aerial bombardment. Over 50,000 people are estimated to have died, and more than 500,000 fled across the border to Ethiopia, chased by government fighter-bombers piloted by foreign mercenaries (African Watch, 1990). In January 1991, the USC, which was a rebel movement in the south entered Mogadishu, and SNM forces launched a lightning offensive in the North, recapturing the major towns. The war was over.

From civil war to independence

On 18 May 1991, Somaliland proclaimed itself independent and Hargaisa was chosen as its capital. In May 1993, a council of elders elected Mohammed Ibrahim Egal as the president, and his appointment for a second term in 1997 (Lewis, 2002: 282). In his term the country redrafted its constitution and adopted multi party system. In May 2002, president Egal died, while he was in South Africa for medical treatment (DFA, 2002). The vice-president Dahir Riyale Kahin was sworn to succeed the rest of the term. In 2003, the country had its first direct presidential election, in which the people elected their first president. Mr Dahir won the people's vote with 80 votes difference from his closest rival, a veteran SNM commander (IRIN, 2003). So far, the international community has not recognised Somaliland as an independent state. Because of its unofficial status, Somaliland cannot enter into formal trade agreements with other nations or seek assistance from the world's financial institutions. Somaliland is believed to have rich oil deposits in the coastal region but companies interested in exploring them are hindered by the lack of proper insurance for their equipment and personnel.

2.1 Economic overview

The Somaliland economy has undergone important structural changes since the war. In a move to fuel the economy in the region, the former President Egal endorsed a liberal economic regime (GOS, 1999). The ending of state monopolies and discriminating economic controls, together with private sector expansion, has significantly contributed to the growth of Somaliland's economy in the aftermath of war. About ten percent of the total geographical area of Somaliland is classified as suitable for cultivation, of which some three percent is actually under cultivation (GOS, 1999). For several decades, however, rain-fed farming has been declining with some of the most productive areas either falling into disuse or being used solely for fodder production. In contrast, irrigated farming in

Somaliland has increased substantially over the last two decades. 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. Although Somaliland has a coastline that extends for 850 km, it is the least developed area (GOS, 1999). Yet still, the people of Somaliland still favour meat ahead for seafood. The service sector has also experienced rapid growth in the post-war period, with a proliferation of companies providing the latest communication facilities, airlines and financial services (Economist, 1999: 35). But still livestock is the backbone of the economy.

Much of Somaliland's post-war economic growth has been linked, directly or indirectly, to the livestock sector. 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 pastoralists or as agro-pastoralists. 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 (GOS, 1999). Livestock production is estimated to represent 60-65% of the national economy and government revenue is heavily dependent on livestock exports (GOS, 1999). Between 1991 and 1997, livestock export grew considerably, exceeding pre-war levels as Somaliland exported some three million heads of livestock in 1997, mostly to Saudi Arabia (UNDP, 1998:60). 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 (UNDP, 1998:61).

In 1997 and 1998, excessive rains led to an outbreak of Rift Valley Fever (RVF) among livestock in the Horn of Africa (Omvärldsbilder, 2000). Saudi Arabia immediately imposed a ban on the import of Somaliland's livestock that was lifted after nine months. In September 2000, over 120 people in Saudi Arabia and Yemen died from contracting RVF (Omvärldsbilder, 2000). As a consequence, the Gulf States placed a total ban on the import of livestock now from all countries in the Horn of Africa. The second livestock ban, severely impacted on overall Somaliland economy.

3. The Nomadic Pastoral Production System

Generally, pastoralism is defined as "...a system of production devoted to gaining a livelihood from the care of large herds of animal, which is based on transhumance and is an adaptation to particular habitat: semi-arid or grassland, in which hoe or digging-stick cultivation apparently cannot be sustained" (Smith, 1992:17). According to Smith, the important aspect of such definition is that it excludes sedentary people who own large herds of animals (Smith, 1992:17). It also stresses the marginal nature of the ecology to which pastoralism is best adopted. Somaliland pastoralists share the same definition. The primary production targets of Somaliland's pastoralists involve maximising the use of subsistence products (milk, meat, skins), meeting social obligations and providing insurance against disasters such as droughts, epidemics or raids. The latter was achieved by building up a large herd in good years. Combined with migrations between wet and dry season, the Somaliland's pastoral society, with its clan-based political culture, has survived recurrent droughts and man-made calamities relatively intact. The current situation facing the pastoralist in Somaliland, which will be highlighted in this study, however, must be understood in terms of the changes that have taken place in the pastoral production system over the last one hundred years.

3.1 The pastoral herd and division of labour

The traditional pastoral herd consists of goats and sheep (shoats) and camels. These 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 (Lewis, 1999:32; Ehlers & Witzke, 1992: 17). Camels and goats in particular are better adapted to the harsh conditions of the nomadic environment than cattle and sheep. Camels, which can stay without water for a month, are sent to far places to graze. Shoats, and some milk and burden camels, graze closer to the household or the nomadic camp (Lewis, 1999: 32). Camels are carefully bred for milk and for carriage. Burden camels, which are not normally ridden except by the sick, transport huts and nomad's worldly possessions from place to place. Camels are often not slaughtered, except on important rituals and religious occasions (Lewis, 1999: 84; Ehlers & Witzke, 1992: 17). On those occasions, usually the male camels are killed or female-camels who have completed their calving years, which normally lasts about fifteen years. According to Lewis, the slaughter of a female-camel before

she has finished her calving years is meant to impress God, saints or to honour a special guest (Lewis, 1999: 84). In urban areas, a man's substance is measured by having a lot of money, while among pastoralists it is primarily by the size and the quality of his camels. Further, the value of a man's life is also measured in; 100 camels for a homicide against man, half of that for a women (Lewis, 1999: 84-86; Ehlers & Witzke, 1992:19). The exchange of gifts of livestock and other wealth that cement a marriage between a man and a woman is also conducted in the medium of camels.

Herding and caring for livestock is considered hard work and imposes upon the family a specific division of labour. As is common in other herding communities, Somali pastoralists use a division of labour by age and sex to manage their livestock. Each household member has specific tasks to perform. Men care for camels, while women tend sheep and goats (Lewis, 1999: 84-86; Ehlers & Witzke, 1992: 19). The husband typically commutes between the camel camp and the nomadic hamlet (temp. house). Men are responsible for fencing the nomadic hamlet, acting as scouts for fresh pasture, watering animals from the deep dry season wells and providing leadership and protection for the household. The loading and off-load of the camels, the erection and dismantling of the nomadic hut with its wooden supports and skin covering are women's. In these tasks a wife is assisted by other women as well as her daughters. Although all this is strictly the territory of women, when haste is called for, men do not hesitate to help (Ehlers & Witzke, 1992: 20). Children attended to the sheep and goats and women milked them. Unmarried young men (camel boys) attended to the camels (Lewis, 1999: 84-86; Ehlers & Witzke, 1992:18-19).

Animal by-products of milk and meat are produced for subsistence purposes and only occasionally are non-pastoral foodstuffs eaten. Tools, utensils, materials for the nomadic hut are all home made. Ideally, two or three camels were sufficient for the transport of the nuclear family, the hut and all its effects (Lewis, 1999: 84-86). With their much greater powers of endurance and resistance to drought, a man's milk camels are herded by his unmarried brothers, sons and nephews, moving widely and rapidly about the country far from the sheep and goats which, in the dry seasons especially, have to cling closely to sources of water. Men of the family acting as scouts travel long distances in search for pasture with good knowledge about the pastoral environment, the clan areas, communal common grazing areas, and water points (Lewis, 1999: 84-86).

3.2 Migration between wet and dry season

In response to the unreliable rainfall pattern, and to maximise their utilisation of the dry rangeland, production systems are characterised by mobility of whole herds and their owners. According to Fuller, pastoral mobility is an adaptive tool that serves several aspects of livestock production simultaneously (Fuller, 1999: 104). One benefit is the provision of fodder to livestock at minimal labour and lower economic cost. According to her, taking livestock to feed and water is less costly than bringing feed and water to livestock, because of lower labour demand (Fuller, 1999: 104; Smith, 1992:11). Mobility also helps animals develop resistance to diseases, and decrease their vulnerability to outbreaks. Mobility enables the opportunistic use of resources, since the arid ecosystem's productivity is to a large degree unpredictable. This includes moving to minimize the effects and impacts of droughts, and being able to use underused pastures distant from settlements, or those that are only seasonally available (Fuller, 1999: 104; Smith, 1992:11).

The Somaliland pastoralists migrate between different zones in the country and they cross international borders in search of pasture and water. Somaliland pastoralists recognise three topographical zones, which in Somali language are called Guban, Ogo and Haud (Lewis, 1999: 33; Ehlers & Witzke, 1992:31).

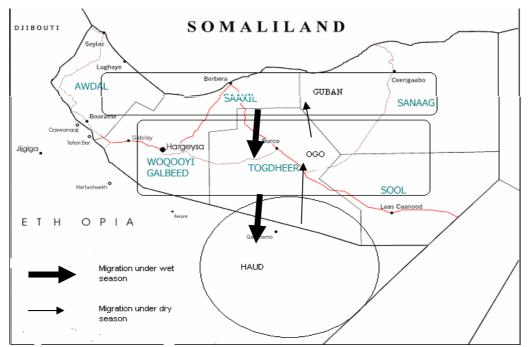


Figure 2. Topographical zones of Somaliland

Source: Hussein 2004 based on Lewis and Ehlers & Witzke.

The Guban (meaning, "burnt") is the narrow coastal region, which is hot and humid with temperatures exceeding 40 degrees centigrade during the summer season between June and August (Lewis, 1999: 33; Ehlers & Witzke, 1992:31). The land is relatively infertile, allowing only for desert-type sparse vegetation. The only rains of importance are the scattered showers, which fall in the comparatively cool months of October to March. The settlements migrate southwards to the highlands during the hot summer months, returning home when the climate becomes more bearable. The Ogo zone possesses rich supply of underground water, which together with its mild climate has encouraged settlement and development (Lewis, 1999: 33; Ehlers & Witzke, 1992:31). The *Ogo* is also where most of the major Somaliland's towns are located, as well as some degree of cultivation. The third topographical zone is the Haud, which stretches across the border from Somaliland into Ethiopia. Although rich in pasture, the *Haud* has virtually no permanent water sources. Historically, nomadic pastoralists grazed their herds in the Haud during the rains, but had to migrate to areas that are more hospitable during the harsh dry season when water sources dried up (Lewis, 1999: 34-35; Ehlers & Witzke1992: 31; Samatar, 1991: 8). However, with the development over the last three decades of permanent water in the form of wells, berkeds¹, and the construction of enclosures, grazing patterns have shifted drastically. In Chapter Five, I will discuss further the proliferation of berkeds, enclosures and their impact on the pastoral environment.

3.3The political and juridical organization of the clan

Clans serve as a source of great solidarity and combine forces for protection, access to water and pasture and political power. Somaliland's clans are divided into clan-family, clan, primary lineages, and *dia*-paying group (Lewis, 1999:155; Ehlers & Witzke, 1992:12). The clan-family and clan are generally speaking the upper limit of clanship, but most clan-families are so vast, (the Isaq clan's number is over one and half million), that they cannot corporate into one single political unit. When there is enmity between clan-families, members of one clan-family might feel animosity against another clan-family. The primary lineage is where the person describes himself as a real member (Lewis, 1999:155; Ehlers & Witzke, 1992: 12). Usually the person marries outside this group, and is encouraged to do so, in order to make ties with the other primary lineages. This is to pre-empt future feuds and wars among different lineages.

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¹ Berkeds are cemented water halls that harvest rainwater or preserve water that is bought on the open market.

The third, which is the *dia*-paying group, is the most important corporation of all (Lewis, 1999: 159; Ehlers & Witzke, 1992: 12). The *dia*-paying group (blood compensating), is an alliance formed by related lineages within a clan by means of a contract. It is traditionally an oral contract but during the British colonial era, such contracts were also recorded in writing to the district officials (Lewis, 1999:163). The British used to encourage such a corporation, and accepted it as a unique corporate political group among pastoralists (Lewis, 1999:163). Such contract clearly states the rights and duties of members of the *dia*-group. One such right deals with the camel ownership. For an instance, a man has primary, but not absolute rights over his camels (Lewis, 1999: 83). Camels of the individual members of the *dia*-paying group constitute a joint stock-wealth as a group. Camels are branded, not with the brand of the individual, but with the brand of the *dia*-paying group (Lewis, 1999: 83; Ehlers & Witzke, 1992: 13). Sheep and goats, on the other hand, bear the brands of their individual owners. The binding contract states that members share a joint responsibility for homicide and other injures done by member of the group.

SAAB SAMAAL Isaaq Darod Digil Rahanwein Hawiye Dir Clan family Marehan Dulbahante Mijertein Clan Warsangeli Ogađen Sub-clans Dia-group

Figure 3. Clan structure

Source: Ehlers & Witzke, 1992:13

In the case of a killing by an outsider, the group also shares in receiving a specified portion of the compensation. Other lesser injures too are similarly compensated in a standard tariff of damages expressed in different amounts of camels (Lewis, 1999: 83; Ehlers & Witzke,

1992:13). If a group with a remote ancestor lacks the numbers to constitute its own *dia*-paying group, it might join with another such group, thus minimizing the financial burden. This form of insurance functions as mutual aid in times of economic hardship or other emergencies. In 1954 it was estimated that more than 360 such groups existed in Somaliland and among the nomads, membership ranged from 300 to more than 3,000 members (Lewis, 1999:170).

3.4 Pastoral resource tenure

All pastoralists of Somaliland adhere to the communal type grazing pattern of East African pastoralists, where the range is common property belonging equally to all members of the grazing group. The grazing groups are the family herding units, which are members of the sub-clans, which are constituent parts of the clans. Although clan-grazing areas can be designated from the common usage, the borders of such grazing zones are never strict, and they overlap with neighbouring groups at various seasons or during different years (Lewis, 1999: 49; Unruh, 1995:20). This overlap increases in times of drought as members of one clan may pass into another clan's territory when its own grazing and watering resources become scarce. In many areas, a number of clans graze their livestock together sharing the same resource. Clans are not stopped from using other clan's grazing resources, especially during droughts (Lewis, 1999: 49; Unruh, 1995:21). If a pastoralist from a neighbouring clan is allowed to use grazing resources, the person becomes allied with the clan, rather than land being removed from the clan's territory. There is a common understanding that elders in a particular area have some authority over resource use. But this authority is usually only exercised at times of distress.

3.5 Shir and Xeer

The society of the pastoral Somalis is fundamentally democratic and traditionally, councils of men make decisions (Lewis, 1999: 198). These councils are egalitarian, although age, lineage, seniority, and wealth can have influence. In these councils, all men (over 15 years of age) are councillors and all men politicians (Lewis, 1999:198, Ehlers & Witzke, 1991:14). The clan elders make up the body that calls upon a meeting (Shir) and elects a temporary council. The meeting often takes place in the shade of a tree or tea/coffee-shop in the village (Lewis, 1999: 198). It is also important that a sheikh is present at these Shir, not only to open the meeting with verses from the Koran, but also to calm down the participant if the debate gets out of hand. Usually the sheikhs, have no saying in the debate, but act as mediators, as they have the respect of all pastoralists (Lewis, 1999:198; Ehlers & Witzke, 1991:14).

In these meetings, the members of the clan discuss disputes among clan members, as well as disputes with other clans. If the group is above a certain size, for instance if it has more than a thousand men, then it is represented by more than one person (Lewis, 1999:198; Ehlers & Witzke, 1991:14).

There are no limits on what to discuss in these meetings, from trade, to debts, land disputes, government policies, maintenance of wells, so on. What is agreed upon becomes the traditional law called "Xeer" (Lewis, 1999:198). The "Xeer" then becomes the prevailing law, until further Shir decide otherwise (Lewis, 1999:198). Concern for the environment is also expressed through the *Xeer*, with rules that protected valuable trees, such as shade trees and trees under which meetings take place. If disputes over, land or water, for example arise, the Shir selects a group among them called "guddi", to act as informal court. This group decides who is guilty and gives penalties (Lewis, 1999: 228). Appeal against such rulings, are sent to a neutral group of elders, who are not related to either party. Shir and the subsequent legislation are important parts of the pastoral way of life (Lewis, 1999: 228; Ehlers & Witzke 1991:14). As the meeting comes to an end the temporary council is dissolved, since it was never meant to be a permanent one (Ehlers & Witzke, 1991: 13-14). This customary communal system function well by providing equitable access to grazing land and water to all, as well as rights and obligations for all those involved.

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² For further reading of Shir and Xeer, read Chapter Seven (Authority and Sanction) of Lewis, *Pastoral Democracy*, P. 197-241.

4 The Transformation of the Pastoral Production System

In Somaliland, the arrival of the British in the late 19th century brought profound changes to the production system, as it established the basis for Somaliland's livestock export economy. The transformation became apparent in changes in the system of pastoral production and the peoples' relationship to the pastoral environment. These changes make up the origin of the crisis facing Somaliland's pastoralists today.

4.1 Livestock Trade and Wealth Accumulation

Livestock export to the British garrison in Aden, Yemen was limited, but increased over-time (Ehlers & Witzke, 1991: 39). The year 1840, some 8,000 animal hide were shipped from Berbera port to Aden, but that number has increased to 23,680 animal hides and 15,600 goats and sheep in 1883 (Ehlers & Witzke, 1991: 39). At the turn of the century, it reached the peak of 60,000 animal exports (Ehlers & Witzke, 1991: 39). But livestock export got its greatest lift with the oil boom of 1950s and the growing of the number of Muslims going on the pilgrimage in Saudi Arabia. This created an annual demand for meat and the ritual slaughtering of one sheep/goat per pilgrimage (Ehlers & Witzke, 1991:40). As the trade in livestock grew, livestock traders and wealthy nomads (sometimes the same people) invested the surplus in buying trucks to transport animals, water development and animal fodder. Access to sufficient water has always been a problem for the nomads, who earlier relied on erratic rainfalls and water points. One of the water innovations was the construction a new kind of water harvesting, called berkeds. These wealthy nomads, dominated the livestock production, but they also invested the surplus in other businesses (Lorries, boutiques and houses), via relatives in the cities (Ehlers & Witzke, 1991: 46).

They sent their children to live among those relatives in the cities in order to get education, which further strengthened the nomad family's position (Ehlers & Witzke, 1992: 51). Not only did the individual group get richer and more powerful, but it pursued its interest at the expense of the common interest of the clan. Besides these wealthy nomads, there were those nomads who had fewer herds and could not manage the stiff competition that the market economy had brought to the community. They were either forced to work for the wealthy nomads or to sell their herds and seek work opportunities in the city, often in a low paying job (Ehlers & Witzke, 1992: 51).

Rural out-migration is in fact another development associated with the commercialisation of livestock production. Somalis began to migrate to England over a century ago and, after the prolonged drought of 1974, they also moved in large numbers to the Gulf States, seeking better economic opportunities. The development of livestock trade also stimulated the expansion of towns, communications, and the import of consumer goods (Ehlers & Witzke, 1991: 47).

4.2 Development Policies

Both the colonial and the post-colonial administrations failed to produce development policies to keep pace with the changing social, economic, and ecological conditions affecting pastoralism. Efforts to develop the vital nomadic economy have been driven more by the interest of the administration than by the needs of the herding communities. The aim was to integrate the nomadic economy into a market economy, so that it could contribute to the administration, in the form of taxation (Ehlers & Witzke, 1991: 52).

The Colonial Administration

The difficulties faced by the African pastoralists today can be traced back to the actions taken in colonial times that had collective impacts on pastoralism (Charles, 1998, 16). During the colonial rule in Africa, "... pastoral land was often assumed to be unowed or underutilised... land use was conceptualized mainly in terms of its potential for cultivation agriculture, particularly cash crops" (Charles, 1998: 16). In Somaliland, which has meagre arable land, the policy of the British Administration was to bring pastoral production under its control and curb their mobility, but the Somaliland pastoralists successfully evaded their attempts. The colonial power tried to govern the Somali tribes in Somaliland by restraining mobility in order to control and "to avoid tribal trouble" (Nauja, 2002: 2). In a treaty between the British and Italians in 1924, the two governments agreed to make an effort to prevent any migration of Somalis across the borders (Nauja, 2002: 2). But that effort failed as it was impossible to control the Somali nomads. The aim of territorializing the nomads was articulated as a question of maintaining order to avoid the Somali clans waging war on each other or on the colonisers (Nauja, 2002: 2). As mentioned in Somaliland's history, the British administration was engaged a guerrilla war with Mohamed Abdullah Hasan. The British alleged that the guerrilla's powerbase lay with the nomads and that their mobility helped the guerrillas to move from place to place (Nauja, 2002: 2).

Despite the British effort over the years to settle the nomads, they failed to stop their migration. 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 (Nauja, 2002: 2). 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 (Nauja, 2002: 2).

The Somali state

The incorporation of pastoralists into the state structures has resulted in political marginalization and loss of autonomy and with pastoral lands partitioned among several colonial states and Ethiopia. Most borders were made through rangelands, and as a result pastoralist peoples were frequently divided between several states. As noted before, major part of Haud Zone lies in Ethiopia, which is one of the migration zones of the Somali pastoralist. Although the new borders never hindered the migration, this was nevertheless, a loss for the pastoralists.

Post-colonial regimes continued the historic neglect of the pastoral sector. The development policies of the civilian administrations (1960-1969) and the military regime (1969-1991) in respect to the pastoral sector were remarkably similar. Their approach was to modernize food production, especially, crop production, under the guidance of the central government. As in a number of other African states, the greater part of political power in Somalia came to reside within the emerging urban-based political and bureaucratic elite (Ehlers & Witzke, 1992:52). The latter group saw pastoralism not as a viable livelihood and mode of land use, but as an irritation, a threat, or as a resource to be harvested (Unruh, 1995:22). However, as was the case during the British era, pastoralists have had the ability to evade attempts of external control. The state realized that some forms of interventions were required in order to access this production, and various development efforts have been launched. But, according to Unruh, the development activities were not made to strengthen traditional institutions, or to allow their continuing development (Unruh, 1995:22).

4.3 The "tragedy of the commons" approach to reform

Development efforts are often based on the premise that pastoralist land tenure system are "...structurally incapable of efficient land use and will inevitably lead to land degradation through overgrazing" (Charles, 1998: 6). Such argument, according to Charles, is often based on Garrett Hardin's model "the tragedy of the commons" (Charles 1998: 6). Garrett Hardin wrote his influential article in 1968 and the title of his article "the tragedy of the commons" has come to symbolize the degradation of the environment that is to be expected whenever many individuals use a scarce resource in common (Hardin, 1968). To demonstrate the logical structure of his model, Hardin asks his reader to picture a "pasture open to all" (Hardin, 1968). He then studies the structure of this situation from the viewpoint of a rational herder. It is only natural he says, that each herdsman wants to maximize his animal stocks on the common pasture area. He receives direct benefits from the commons but suffers delayed costs from the degradation of the commons due to overgrazing. The rational herdsman concludes, "...that the only sensible course for him to pursue is to add another animal to his herd" (Hardin, 1968). But, according to Hardin, this is also the conclusion reached by every rational herdsman sharing a commons and there is the tragedy (Hardin, 1968). Each man "...is locked into a system that compels him to increase his herd without limit - in a world that is limited" (Hardin, 1968). Such an argument, according to Charles, led to "...tacit government and donor support for the privatisation of pastoral commons" (Charles, 1998: 6).

4.4 Land Reform and Land Registration

In 1975 a land reform was introduced in Somalia, (Land Reform Act) which was meant literally to take over the traditional tenure regimes (Unruh, 1995:23). It was formulated to give advantage to state enterprises and no rights were given to pastoralists other than those included in government sponsored cooperatives and associations. Two years before the implementation of the Land Reform Act, the government abolished traditional clan and lineage rights of use and access over land and water resources. The unified civil code of 1973 was part of the military government's crackdown on clan usage and clan influence among the Somali society (Unruh, 1995:23).

All land in Somalia³ was declared to be state owned and administered by the former Ministry of Agriculture (Unruh, 1995:23; Ehlers & Witzke, 1992:53). The land was to be leased from the government, and pastoralists lost land they previously depended on. Furthermore, the leasing registration process become extremely difficult for pastoralists, as it required much time and money and the administration was located in Mogadishu, Somalia (Unruh, 1995:24). Well connected officials and the urban-based wealthy nomads/livestock traders soon corrupted the land registration procedure (Unruh, 1995:24). This gave non-locals the opportunity to gain title to large tracts of land customarily used by pastoralists. Those who lost land then shifted to use more marginal land resources. A frequent use of newly registered large holdings was fodder farms (Unruh, 1995:24). Areas of land, previously used for dry season and drought grazing by pastoralists, were registered, enclosed and guarded, and pastoralists were charged a fee for access to the natural pasture. This often resulted in violent conflict, as nomads were unwilling to pay for what they previously had accessed for free.

Under the Said Barre regime (1969-1991) the creation of cooperatives was part of the effort to construct a socialist economy. The 1974 Law on Cooperative Development intended to facilitate scientific management of the rangeland and to modify traditional pastoralist tenure arrangements so that pastoralists would share scarce range resources peacefully and efficiently (Unruh, 1995:25). Fourteen cooperatives were created, with each participant family being allocated an exclusive 200 - 300 ha grazing area, with common lands available in times of drought (Unruh, 1995:25). The plan was that when these cooperatives were fully in place the government was to provide health, educational services and a marketing outlet for livestock (Unruh, 1995:25; Ehlers & Witzke, 1992:53).

Although, there is little investigation of the Somali government's cooperative reforms, it is widely believed to have failed in meeting the need of the pastoralists. For instances, there was a mismatch between grazing areas allocated to cooperatives and the needs of herds during drought when mobility was necessary (Unruh, 1995:25). By 1979 the cooperative system was beginning to crowd smaller livestock owners that were not members of a cooperative out of certain areas as grazing lands were increasingly enclosed (Unruh, 1995:25).

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³ Note that Somaliland was part of the republic of Somalia and called the Northern regions (1960-1991). All pastoralists in Somalia felt the effects of the 1975s Land Reform Act. But the impact of that reform would continue to affect Somaliland pastoralist throughout the 90s, even thought Somaliland became separate entity.

5. Pressure on Pastoral Environment

In the previous chapter, the changes that have taken place of the pastoral production system were highlighted. One of the innovations was the improvement on water problems. Modern development strategies have introduced mechanized boreholes, wells and berkeds to alleviate the problem of water availability. In a land where sometimes ground water is located at 150 meters deep, berkeds are the prime source of water for both animals and the inhabitants of dry nomadic areas (Ehlers & Witzke, 1991: 45). Berkeds maximized rainfall harvesting, and relieved pressure on groundwater. But this also created unforeseen environmental problems, as new settlements grew around the water points and berkeds. Cyclical droughts, enclosures and increase in livestock further added to land degradation.

5.1 Cyclical drought

In Somaliland, drought is a recurrent phenomenon and is considered one of the main environmental pressures on the livestock economy. The country did experience prolonged droughts in the seventies, eighties and nineties. With the exception of 1974-5 droughts, none of droughts led to displacement. 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 and water stress. Droughts can trigger food shortages, the forced sale of livestock at low prices, migration to urban centres, and the loss of human lives from starvation or social conflict. But, 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, the "equilibrium" and "non-equilibrium" principles. The "equilibrium" ecology principle is based on the premise that the environment is an inherently inflexible ecosystem (Sullivan, 2002:6). 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 environmental changes are the result of dynamic interactions between many factors (physical and non-physical) whose certainty is not always predictable (Sullivan, 2002:6).

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. So according to 'non-equilibrium' principles, environmental change is a normal function of a dynamic ecosystem (Sullivan, 2002:7). In the risk-prone environment of Somaliland, pastoralists have developed strategies to cope with the impact of rainfall failure. Hiring trucks to transport water and grass to drought affected areas and building berkeds 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.

5.2 Increases in Numbers of Water Points and Settlements

The first berkeds to harvest rainwater were introduced in the dry Haud zone in 1950s. There was steady growth in their number in 1960s and a sharp increase in 1970s following the drought of 1974 (Sugule & Walker, 1998).

SOMALILAND HARGEYSA Odweyne • Burco Ceynabo Ceek Las Caando Harada **ETHIOPIA Bulale** Key Well Geladi Borehole Galkayo Yo-ub HAUD

Figure 4. Water points of Haud (1960)

Source: Sugule & Walker 1998

In the figure above, the water-points of Haud were small in numbers in the 1960s and early 1970s, but nevertheless these were something new to the zone, which usually had no permanent water-points. One specific event that further added to the proliferation of permanent water points was the long drought of 1974-1975, which affected the entire region

(Sugule & Walker, 1998). Despite the campaigns at that time to avert the impact of the drought, some 20,000 people died as a direct result of the drought (Bjelfvenstam, 1982:59). The Somali pastoralists and agro-pastoralist lost about 5 million sheep and goats, 1 million cattle, and several hundreds of camels to the drought (Bjelfvenstam, 1982 59-60). The drought also forced the relocation of 120,000 pastoralists to the southern Somalia, where the majority of them became farmers (Bjelfvenstam, 1982:61). Somalia at the time was a firm ally of the Soviet Union and it made available 20 transport planes to move these pastoralists to the southern Somalia (Bjelfvenstam, 1982:61).

In order to alleviate the remaining pastoral population's problem with water, the Somali state in joint coordination with the Ethiopian government launched a campaign to build more water points in Haud zone. But such a positive activity would affect the pastoralist in a different way. In their study of the proliferation of berkeds in Haud zone, Sugule and Walker found that the steady increase of water points, mainly berkeds, were followed by new settlements (Sugule & Walker, 1998; Ehlers & Witzke, 1992: 47). They maintain, that the creation of new settlements often follow a familiar pattern, which starts with some livestock owners constructing berkeds at a site, followed by an individual opening a small shop or a teashop at that place to trade with pastoralists. Other pastoralists build berkeds there and soon a new village starts to appear. The village becomes a stepping-stone for livestock trades and other traffickers, and as the governments adds a mosque and a police station, the nomad village is on the map (Sugule & Walker, 1998; Ehlers & Witzke, 1992: 47).

Although many such berkeds villages were destroyed during the Ogaden war of 1977 and the subsequent civil wars, berkeds construction was restarted after 1991 as people returned to the country. The people, mainly refugees were moving in two directions (Ambroso, 2002: 17). The Ogaden refugees who come to northern Somalia during Ogaden war, returned to Ethiopia, when the former regime of Ethiopia fell. The Somali refugees, mainly Isaq clan, who fled in 1988 from the bombardment and persecution of the former government, also started to return. Refugee camps were created on either side of the Somaliland-Ethiopia and Somaliland-Djibouti borders. In Somaliland 12 refugee camps were distributed in the Hargaisa-Borame corridor (Ambroso, 2002: 20). There has not been any study quantifying the impact of these camps on the pastoral environment or the area affected. Nevertheless, from February 1997 to October 2001, the United Nations High Commissioner for Refugees

(UNHCR) officially assisted the voluntary repatriation of an estimated 170,000 refugees back to Somaliland. (Ambroso, 2002: 22)

As people went back, their primary preoccupation was accessing water resources for themselves and their livestock. Berked building became to many the only source of water.

HARGEYSA

Odweyne

Burco

EI Hume

SOMALILAND

Ceek

Harada

Kamaboker,

Gashanko,

Gashanko

Felfel

Bulale

Gosay

Gosay

Gashano

Gorgor

Gararo

G

Figure 5. Water points of Haud (1998)

Source: Sugule & Walker, 1998

In contrast to the figure four, the proliferation of water points in Haud, mainly berkeds, is more dramatic in the figure above. In the background the old water points of the 1960s can still be seen, mainly from wells and boreholes, but the berkeds are the most eye-catching. Although Sugule and Walkers research were only restricted to the Haud zone, it was equally dramatic in other pastoral zones of Somaliland. In regions like Sanag in Ogo zone, where berkeds were previously uncommon, they are now widespread. Due to lack of regulation, water points - mainly berkeds, are increasing and the distance between them is diminishing. There is no reliable estimate on the number or density of berkeds in Somaliland, but in a given district their number may vary from less than ten to more than one thousand. The concentration is most acute in Hargaisa and Togdher regions. In 1998 there were estimated to be 3,335 berkeds in Hargaisa region alone excluding the district of Gabilay, and in 2001 as many as 11,500 in Togdher region (Swiss Group, 1998). As in Haud zone, sedentarisation has

increased in parallel with the proliferation of berkeds as people have settled around them. While some argue that the berkeds accelerates the process of rangeland degradation, others argue that the multiplication of berkeds 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.

5.3 Enclosures and the privatisation of rangeland

The enclosure of rangeland is another critical environmental preoccupation of Somaliland pastoralists. Enclosures represent the privatisation of communal grazing land and as such are cause of conflict between pastoralists and the enclosure owners. Enclosures were the result of the State Land Reform of the 1974, which enabled private people to enclose communal land for cultivation and fodder production. The aim of that law was to control the pastoralist production and curb the clan influence over pastoralists (Ehlers & Witzke, 1992: 53). But as the traditional resource tenure weakened, private initiatives took its place and individuals continued to grab land for themselves and for their group. The illegal enclosures continued throughout the 80s and 90s (Economist, 2001:42). This practice is not new, but there were rapidly increasing trend ever since Somaliland got its independence. Enclosure owners illegally grab a portion of communal land, sometimes as large as 5 to 10 square kilometres, in their home (clan) territories, which they then prevent others from using. In the *Qadow* area south of Gabiley, enclosures now prevent the movement of pastoralists and their herds between the Haud/Ogo highland zones (APD, 2002). According to the Economist, the free enterprise philosophy of the former Somaliland's government further aggravated the situation, as more and more people enclosed huge areas of common grazing land (Economist, 2001:42). Now enclosures are very common in Togdher and Hargaisa, the main inhabited districts of the country.

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 a source of fodder for export animals. Enclosure owners protect this land from indiscriminate use, and some of them have invested in the process. Somaliland is faced with a dilemma regarding enclosures. 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 junks of grazing land

5.4 Increase in Livestock Population

There is no exact data on the size of the herds 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% (GOS, 1999).

Table 1 Estimated numbers 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: Somaliland Ministry of Planning, Dept, of statistics. 1999

However, the above annual rates of increase are based on the 1975 census and do not take into consideration the deaths and the losses due droughts and other calamities that occurred in later years (APD, 2002). For example, in 1999 as result of rain failure for three successive raining seasons in the west of Hargeysa, almost 70% of cattle in those areas have died. Similarly, about 60% of cattle and 35% of sheep in Sanaag region were lost in between 2001 and 2002 (APD, 2002). It is believed that there has not been an increase in any of the four domestic species - sheep, goat, camels and cattle - since 1991. Furthermore, 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. The FSAU (Food Security Assessment Unit)⁴, which 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 (APD, 2002). Today livestock are increasing in some regions like Sanaag and decreasing in Haud. Livestock are increasing along with the growth of the population in some places, and in some places like Haud the population is increasing while numbers of livestock are decreasing. It is widely believed that the Haud 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.

⁴ FSAU provides comprehensive and in-depth information and analysis on the food security situation and nutrition status of people living in Somalia/Somaliland. It is managed by the Food and Agriculture Organization (FAO) with funding from the EU and from USAID.

6. Analysis and Conclusion

The incorporation of the pastoral production system into the market economy and the efforts of so called developmental policies to shift traditional resource tenure to state tenure have among other things, contributed to land degradation. It also contributed to the erosion of traditional social structures and the cohesion of nomadic pastoral societies. The widespread feeling is now that the spirit of cooperation and collective responsibility that was once central to traditional animal husbandry has been lost and is being replaced by individualism, greed, mistrust and competition. I will further analyse my two research questions, namely the impact that the state tenure system and the proliferation of water points, enclosures and settlements have on pastoralists.

6.1 The Weakening of Social Structures and Land Disputes

As noted in chapter three, the Somali government's land use efforts ignored how such development activities affected pastoralist tenure systems. The abolishment of the clan resolution system in 1973 and the subsequent state tenure system of 1975 resulted in mistrust and an increase in land disputes and illegal enclosure on pastoralist land (Ehlers & Witzke, 1992: 53). Such mistrust was further fuelled by government officials' often-condescending view about the nomad way of live. Nomads were seen as primitive people that needed to be civilized, and put under state control and supervision (Ehlers & Witzke, 1992: 53). From their point of view, the nomads see state policies, such as the Land Reform Act as intrusive to their lifestyle, which they proudly value as a legitimate lifestyle (Ehlers & Witzke, 1992: 53). Although there were processes within the Land Reform Act program that were in place to avoid multiple claims to land, the state land tenure dispute resolution mechanisms were inadequate to resolve the many competing claims (Unruh, 1995:26). For pastoralists, the forms of resolution comprise various traditional methods, such as settlement by personal negotiation with the opposing party through Shir. But the state and traditional dispute resolution mechanisms were incompatible, as there was deep distrust of one another and difficulty in finding common ground. According to Unruh, these competing claims to resources, "...together with increased pressure on grazing resources, and increasingly constrained livestock movements, worsened rangeland degradation as livestock densities surpassed the carrying capacity of areas pastoralists still had access to" (Unruh, 1995:26).

This meant increased vulnerability for pastoralists and the range resources they occupied. As the land grab continued throughout the 1990s as a result of a weak Somaliland government, as well as weakened traditional resource management, this also led to competition in the marginal zones and contributed to rapid degradation of these areas. This degradation then contributed to changing grazing patterns aided by proliferation of water points.

6.2 Changes in Grazing Patterns and Water Points

Nomadic pastoralism in Somaliland has always been characterized by seasonal migration between the wet and dry seasons. The mobility of households and herds is a distinctive adaptation to this risk prone environment. Restrictions on mobility affect livestock production, rangeland ecology and inter-group relations. Starting with Somalia's independence in 1960 and the creation of permanent water points in arid zones such as Haud, grazing patterns and cyclical migrations have been altered. As stated before, the drastic increase of building permanent water points in Haud was a response to the long drought of 1974, when both human and livestock suffered. The relief effort that was made to fight the consequence of the drought, to save the livestock and pastoralists, have triggered unprecedented new pattern. As water points alleviated one problem, it created an even more serious one. Areas that previously could be grazed only during the wet season could now be grazed all year round (Sugule & Walker, 1998). 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 Sugule and Walker, some of the pastoralists continue to build berkeds today, even if they are within a close approximates to the government built water points (Sugule & Walker, 1998).

Obviously, it is logical that without access to water, the very survival of the livestock is threatened. But, Sugule and Walker suggest that building more berkeds fulfils also another purpose for pastoralists. The berkeds and the settlements visibly widen the clan territory, as there is competition between clans wanting to establish new centres with berkeds (Sugule & Walker, 1998). Establishment of a settlement inhabited by a certain clan reinforces that clan's claim to control of the surrounding grazing land. Many clan groups want to establish their own villages as a way to enhance prestige or for political gain in the hope that they will be designated as an administrative district (APD, 2002). This is not only a trend in Haud zone, but is also rapidly increasing in Ogo zone (APD, 2002).

Resulting from a weakened conflict solution traditions, nowadays, if two clans living together in village for some reason find it difficult to continue their co-existence, instead of reconciling their differences, one clan moves away and creates a new village a short distance from the old one (APD, 2002).

Whatever the reasons for the pastoralist want to add more villages and berkeds on pastoral land, it is clear this is also adding pressure on the fragile environment. There is a dilemma; namely that more water points are a necessity for the short term, yet more water points will compound the problems of declining pasture and declining livestock production. Proper management of new water sources is therefore essential. One possibility, according to Sugule and Walker, would be to consider ways of restricting new berkeds to existing centres and thereby to conserve grazing areas (Sugule & Walker, 1998). But who would have the authority and the means to enforce such a restriction? As I have mentioned the social stratification that has accompanied the commercialisation of livestock production has led to the elders 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 and are setting up harmful enclosures and builds berkeds. Sugule and Walker argue that the best option is to put an effort to the revival of the traditional institutions (Sugule & Walker, 1998).

6.3 Community Action and Local Solutions

In the absence of strong government authorities in the case of Somaliland and negligence in the case of Ethiopian authorities (regarding Haud), there are calls for traditional institutions to play a bigger role. In some areas, these traditional institutions are already responding to the pastoral degradations. Some communities, for instance, have agreed to refrain from constructing berkeds in certain areas in order to conserve these areas for grazing. These agreements are often based on Somali traditional law, "Xeer". In Gashamo, a district of Haud, the Habar Yonis clan have agreed among themselves that new berkeds should be constructed only at existing settlements, not in the plain grazing area (Sugule & Walker, 1998). This is to prevent new berkeds and settlements starting in the remaining areas of grazing land between the present settlements. This Xeer was agreed upon in 1996 at a (Shir) meeting of Habar Yonis elders in Gashamo (Sugule & Walker, 1998).

Although such agreements seem to fulfil its purpose, they are difficult to monitor, because of the different lineage affiliations. According to Sugule and Walker, some berked owners in existing settlements sometimes discourage others from building berkeds in their vicinity, forcing them to construct at new places (Sugule & Walker, 1998). In addition, attempting to enforce the Xeer preventing new settlements, could lead to clan conflict if one lineage section felt it was being denied the right to establish a new settlement in their territory (Sugule & Walker, 1998).

In the Ogo zone, similar community-led actions have taken place in order to find local solutions to the environmental crisis. The Ogo zone, which is the central part of the country and where the major cities are located, has problems with enclosures. Under the leadership of elders, some enclosures were cleared in northwest of the Hargaisa district (APD, 2002). Near Sheikh, in Saaxil region, the community has burned enclosures (APD, 2002). In Odweyne, a district of Togdher region, the local community has taken the initiative to clear some of the enclosures in their areas, burning more than 800 enclosures (APD, 2002). But community efforts have generally been one-time campaigns, and once they are concluded the enclosures reappear (APD, 2002).

In the absence of strong government authorities, the possible role of the Somaliland authorities is to facilitate and police the agreements of Xeer by communities on limiting the number of new settlements, enclosures and water points similar to that agreed by the Habar Yonis in Gashamo district. Sugule and Walker suggest that Xeer agreed on by communities should be recognised by the administration and registered as a binding contract between those communities. As mentioned in Chapter Three, the British colonial administration had an office that facilitated registering *dia*- paying groups among pastoralist and recognized them as a local political entity. Not only is it needed that the administration recognizes the Xeer, but also that it enforces it. As illustrated before there is a difficulty for clans enforcing Xeer on their own, as this is likely to trigger clan conflict.

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