Annex 7

TRADITION AND CHANGE IN THE BORANA OROMO COMMONS OF SOUTHERN ETHIOPIA

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Introduction: The Commons Debate

The concept of 'the tragedy of the commons' formulated by Garrett Hardin (1968) has become 'the dominant framework within which social scientists portray environmental and resource issues' (Godwin and Shephard 1979: 265). It has also been the topic of considerable academic debate, which has questioned the theoretical validity of the concept (Berkes 1989; 1999; Bromley 1992; Martin 1992; Ostrom 1990). According to Hardin's thesis, when resources are held in common, they are subject to overexploitation by individuals in pursuit of their own self-interests. He claimed that this 'freedom in a commons brings ruin to all' (Hardin 1968: 1244). The main theme of his paper was the impact of overpopulation on the commons.

Hardin's critics have identified a number of fallacies in his argument. They have pointed out that it assumes that such collective resources are 'open access' ones, free to all, with no restrictions on use (National Research Council 1986). They have showed that, in reality, such resources were traditionally held under what is known as a 'common-property regime' by communities, which regulated user rights (Doughlin et. al. 1984; Ostrom 1986.). Theorists argued that the model therefore overlooked the role of institutions in the regulation of common resources (Ciriacy-Wantrup and Bishop 1975). According to North (1981: 201-202), 'institutions provide the framework within which human beings interact. They establish the cooperative and competitive relationships which constitute a society and more specifically an economic sector.' He defines institutions as consisting of 'a set of rules, compliance procedures, and moral and ethical behavioural norms designed to constrain the behavior of individuals'. Case studies indicated that such institutional arrangements operated at the local level to protect communal resources, and were grounded in culturally specific norms and rules (Odell 1982; Peters 1987; Hogg 1990). This led to a renewed interest in traditional ecological knowledge and indigenous systems of resource management (Berkes 1999; Johannes 1989; Williams and Baines 1993).

In Eastern Africa, Hardin's model lent credence to the views, which had existed since colonial times, that nomadic pastoralists were environmentally destructive, due to their 'irrational' tendency to accumulate cattle. This propensity was considered to form part of the East African 'cattle complex' or set of cultural traits defining pastoralists (Herskovits 1926). Hardin's views provoked the 'overgrazing' and 'desertification' debates. Proponents of the mainstream view hold that pastoralists are the main perpetrators of environmental degradation (Lamprey 1983; Talbot 1986)[1]. Opponents, on the other hand, consider pastoralists to be victims of misconceived state and development policies and other contingent factors, rather than ecological villains (Hogg 1987; Homewood and Rodgers 1987; Little and Brokensha 1987; McCabe 1990; O'Leary 1984). These and other researchers have stressed the importance of the role of local institutions and indigenous systems of range management (Legesse 1986; Pasha 1983). However, much more work needs to be

done in this field in East Africa and more attention needs to be paid to the traditional environmental knowledge that underlies such management practices.

In this paper, I develop an earlier study, in which an Oromo colleague and I described the traditional conservation ethic of the Borana Oromo of southern Ethiopia and northern Kenya (Kassam and Megerssa 1994). We showed that this traditional resource management model was based on environmental laws and on structurally embedded institutions that formed part of the social structure. I re-examine this normative model in the light of two recent empirical studies among the Borana of southern Ethiopia that document the dramatic changes that have taken place over the last four decades, leading to a transformation of the common-property regime (Coppock 1994; Boku Tache 2000). Despite these changes, like Bassi (2002) and other scholars, I argue that pastoralism remains the most sustainable use of land in this arid and semi-arid environment, and that the traditional system of resource management should form the basis of an alternative approach to pastoral development, both amongst the Borana of Ethiopia and northern Kenya.

The Borana Oromo

The Borana are semi-nomadic or transhumant cattle pastoralists who live on both sides of the Kenya-Ethiopia border and in the Isiolo District of Kenya. They also keep small stock, and more recently, camels in the more arid parts of their territory. They have never been 'pure' pastoralists. Prior to the colonial period, their system of production formed part of a larger regional economy and was articulated to that of agriculturalists and hunter-gatherers through trade and exchange (cf. Kassam forthcoming). There is also some evidence that the Borana may have cultivated barley before their migrations in the sixteenth century (cf. Haberland 1963: 4). According to their oral traditions, however, they first began to cultivate in the period 1659-67, a practice that was condemned by the elders (Goto 1972: 9; Kassam and Megerssa 1994: 90; Tache 2000: 132)[2]. Grain products have therefore always formed an important part of their diet.

The Borana currently number some half a million people[3]. They form part of the larger Oromo nation[4]. Until the sixteenth century, the Oromo were divided into two moieties, the Borana and the Barentu, which represented the eastern and western divisions of the polity (Megerssa 1993:). These spatial divisions were also temporal ones, linked to the principle of seniority/juniority. The Borana were considered to be the first-born (*hangafa*). Elder sons are said to 'open the way' for their younger siblings, to be the first to take possession of new land, and to have the power to bless and curse people and things, as they are 'nearer to *Waaqa*', the Oromo Sky-God (Bartels 1983: 133ff). This privileged position endows them with both rights and responsibilities. They occupy the highest positions of political authority, play the leading role in ritual, and consider themselves to be the custodians of the laws of the land and keepers of the oral traditions. After the separation of the Borana and Barentu, they replicated these moiety divisions and gave them different names (Legesse 2000: 133-193). Today the Borana are divided into the Sabo and Gona moieties, and their land is divided into two regions, Liiban to the east, and Dirree to the west.

It is thought that the Borana expanded from their homelands of Liiban, which they had occupied from the middle of the sixteenth century (Lewis 1966), into the Diiree

region in the period 1656-1664 (Bassi 1997: 25; Goto 1972: 29)[5]. In doing so, they displaced the Warra Daayaa, known today as the Orma, and took control of the key water and pasture resources. Borana oral historians explain that this action was necessitated by the fact that the Warra Daayaa were no longer upholding the tradition, presumably as a result of Islamization. At a more pragmatic level, it has been suggested that these movements may have been due to internal population pressure (Legesse 1973), ecological factors (Wilding 1985), or a response to Somali expansion (Tache 2000).

After assuming control of Diirre, the Borana asserted their authority over the remnants of the Warra Daayaa and other Cushitic-speaking communities in the adjacent lowland areas (*golboo*), which included the camel-keeping Gabbra, Garre, Sakuye and Ajuran, and the Waata hunter-gatherer groups associated with them[6]. These groups became part of a military and political alliance (known as (?)*), through which a common moral order, the 'Peace of the Borana' (*nagaya Boranaa*), was upheld[7]. This alliance was based on ritualised links between the communities, who paid allegiance to the Borana ritual leaders (*Qaalluu*) through gifts (*finna horii*) of livestock or wildlife products. This alliance was an effective means of protecting the communal resources and of maintaining the territorial boundaries from intrusion by outsiders (*siddii*). Each community marked its internal boundaries through ritual performance. Use-rights to resources were regulated through a body of custom and law (*aada seera*) that allocated a place to each producer in the overall system

Until the end of the nineteenth century, the territory occupied by the Borana and their allies extended from the Ganale River in Ethiopia to the north, Lake Turkana in Kenya to the west, the Juba River in Somalia to the east, and the Lorian Swamp in Kenya to the south. These boundaries were notably defended from attack from the Laikipia Maasai and Samburu in the period 1897-1905 and from continuous Somali encroachment on the eastern front, as well as raids from other ethnic groups[8]. Since the Borana were one of the only groups to use horses in battle, they had a distinct military advantage over their adversaries.

British and Abyssinian occupation brought to an end this relative era of the Peace of the Borana. From the late 1890s, these colonial powers redefined the territorial boundaries and imposed an external form of order. As a result, national frontiers and identities now divide the different Borana groups. Nevertheless, in both northern Kenya and southern Ethiopia, due to their relative isolation until the 1960s, the Borana were able to maintain to some extent their own socio-political and ritual institutions (*Gada/Qaalluu*), in which the customs and laws governing resource use are embedded.

The *Gada/Qaalluu* institutions

Gada is an indigenous democratic political and legal system of ancient provenance (Bassi 1996; Baxter 1978; Legesse 1973; 2000). Since its inception, *Gada* has undergone a number of modifications. The current version came into effect in about1456[9]. It is made up of two interlinked institutions (Megerssa 1993). The *Gada* institution has political, judicial and legislative functions, whilst the *Qaalluu* institution is a religious one. Political authority is exercised through elected councillors, their deputies and assistants, who govern through three peripatetic

assemblies (*yaa*), a principal one (Y*aa Arboraa*), headed by the *Abba Gadaa*, or leader of the main assembly, and two subsidiary ones (Y*aa Kontomaa*). These councillors hold office for a term of eight years. The *Gada* is responsible for keeping law and order in the land and plays a major role in conflict resolution. Its duties also include welfare provision and environmental protection. The two principal *Qaalluu*, who represent the moieties, and three minor *Qaalluu*, are hereditary ritual leaders, and live in permanent settlements. They are considered to be the 'life-spirit' (*lubbuu*) of the Borana (Baxter 1978: 166). They maintain the peace of the Borana through prayer and sacrifice. They also confirm political appointments and participate in the principal law-making assembly (*gummii*). The *Gummi*, or 'assembly of the multitudes', serves as a super-ordinate body to collectively oversee political authority and to legislate the law (Legesse 1973; 2000). Until the colonial period, the *Gada* also had military functions. As Legesse (2000: 33) notes, these functions are closely related ones, and traditionally formed part of a single system of governance.

The *Gada* also fulfils important ritual functions. During his period of tenure, each *Abba Gadaa*, together with his officials, performs a ceremonial circuit (*goro marmara*) of the most important sacred places in Boranaland[10]. The assembly moves in a west-east direction, from the ceremonial grounds of Dirree to Dibbee Eela Dalloo in Liiban and back (Tache 2000:112). Traditionally, this circuit probably had a boundary-maintenance function, and was a symbolical means of marking the Borana territory. It forms part of the eight-year cycle of rituals and activities that is performed by the political assembly (Kassam 1999).

This eight-year period of *Gada* rule also constitutes the principal method through which Borana record history and date events, whether of a social, political or environmental nature. It represents the basic unit of historical time computation. Each period is named according to the *Abba Gadaa* in power and is recalled in relation to the specific events that marked his regnum (Legesse 1973). The *Abba Gadaa* thus literally 'makes' history, and part of his responsibilities as a leader consist in deflecting or enhancing any bad or good occurrences that run through his patriclass. In Borana, history is seen as repeating itself through cycles of different durations (Megerssa and Kassam forthcoming). Experts of the oral tradition (*jaarsa argaa dhageettii*) use these cyclical returns to predict periodic drought, war and other environmental and social crises. The cycles thus serve as an 'early warning system', which enables heads of households to make strategic decisions in respect to the movements of their herds[11]. This view of history is related to an elaborate ethno-astronomical knowledge and sophisticated system of time-reckoning (Bassi 1988; Legesse 1973; Tablino 1999).

Gada also represents one of the principal means of knowledge transmission. It is made up of a number of initiatory grades through which the younger members of society are socialized to assume their future social, political, legal, and ritual roles in society (Legesse 1973).

According to Legesse (1973; 1986), *Gada*, which is based on social differentiation according to both age and generation, traditionally contained a number of mechanisms for controlling population growth. Such mechanisms included delayed marriage; the abandonment of sons born to men during the first eight years of the warrior grade (*raba*) and abandonment of daughters for a further eight years[12]. On the basis of a

computer simulated model, he hypothesized that the population would decline by 50% during the first eighty years of the inception of *Gada*, remain steady for two centuries, and then begin to rise at a very slow rate of growth. He suggests that these demographic mechanisms represented an indigenous 'population policy' that had ecological implications (Legesse 1986)[13].

Role of custom and law (*aadaa seeraa*) in environmental management

Borana consider their whole way of life to be founded on custom (*aadaa*) and law (*seeraa*). These two interlinked concepts are closely linked to the notions of peace (*nagaya*), fertility (*finna)* and cosmic order. They constitute the ethical principles and common code of practice, based on distance and respect, (*cheera fokkoo*) according to which the Borana regulate all their relations, including those pertaining to nature and the environment.

As Mohamed Hassen (1994: 16) explains, traditionally *aadaa* and *seeraa* formed part of the 'living constitution' of the Oromo, which was kept in the heart of the elders. The boundary between *aadaa* and *seeraa* is a formal one. *Aadaa*, custom, tradition, or way of life, forms part of everyday knowledge and practice, whilst *seeraa* is a set of codified precepts that belongs to a specialised domain of knowledge, and is transmitted orally from generation to generation by legal experts (*hayyuu*). Different types of fines and punishments sanction violations of the law. *Aadaa* encompasses a more flexible set of cultural rules that generally govern moral behaviour in society. It attributes a place to almost everything in the cultural universe of the Borana, be it person, animal, plant or object, apart from the humble hand-axe (*qoochi*) (Kassam 1986; Oba 1996: 118).

Borana oral tradition traces the origin of the fundamental laws that govern their society to five founding fathers, each known by the title of 'Yaayaa', or 'founder', who laid down its basic precepts: Boru Biluu, Galee Anno, Goloo Gobboo, Maane Leqaa Jaarso, and Galessa (Megerssa 1993:). These five branches of the law relate to (1) the place of man in society and his relationship to his fellow beings; (2) the animal world, both domestic and wild; (3) the plant world; (4) the rules of domestication and watering of livestock; and (5) the methods of time-keeping and historical reckoning. Each of these branches is composed of more specific laws and prerogatives, in respect to all that is found in the heavens above, on earth, inside human settlements and outside them[14].

The laws pertaining to the environment are generically known as those of 'the outside that is part of the inside (*aloof alollaa*). They relate to everything that is found outside (*ala*) the camp or village (*olla*) upon which people and livestock depend for their sustenance. This general category encompasses all the specific laws relating to Nature and its exploitation by man. It includes the laws on the use of crucial resources such as mineral water (*horra*), pasture (*marra*), trees (*muka*), wildlife (*bineensa*), as well such activities such as the mining of salt (*soodha* or *megado*), the firing of pastures (*qoqa'u* or *gubbuu*, depending on the scale), cultivation (*obru*), and hunting (*adamaa*). It assigns the custodianship of wild animals to the Waata hunter-gatherers. It lays down the rules safeguarding prominent rocks and sacred mountains (**siddaa*) and trees and other vegetation at ritual sites. It also defines the rights of access to all these communal resources by outsiders (*siddii*).

These laws are not immutable. Like other Borana laws, they form part of a living tradition. They are reviewed, reiterated and if necessary, revised and supplemented, every eight years as part of the *Gada* cycle of power. This review process takes place in the fourth year of the *Gada* and is held at two legislative assemblies (*gummii*), those of Eela Gaayoo in Dirree and Eela Dalloo in Liiban. The *Gummii* Gaayoo is a pan-Borana assembly, attended by the ruling *Abba Gadaa Arboraa* and *Kontomaa*, retired and prospective *Abba Gadaa*, legal experts, clan representatives, and ordinary members of the community. The retired leaders serve in an advisory capacity. Only the active and retired *Gada* councillors attend the *Gummii* Eela Dalloo, where, it said, they specifically review the environmental laws. During his term of office, the *Abba Gadaa* is responsible for upholding these laws 'hammered' out at the *Gummii* and for handing them over to his successor.

Abdullahi Shongolo (1994) has described the proceedings of the *Gummii* Gaayoo held between August and September 1988[15]. The meeting lasted about three weeks and was attended by the above named Borana delegates, government and NGO representatives, missionaries and researchers. Amongst the laws pertaining to the management of communal resources, the assembly reiterated priorities traditionally accorded to the livestock of *Gada* officials, medicine men, hunters, and blacksmiths at water wells. It urged that the customary watering schedules be maintained and condemned the modern practice of selling water. It expressed dissatisfaction with the commercialisation of salt at mines, especially its sale by non-Borana. It advised people not to cut down large trees for the sale of wood, in clearing land for cultivation, and not to burn bushes. It banned, thenceforth, the practice of hunting. It reaffirmed the relationship with other groups like the Gabra, Gujjii, Konso and Ejji Somali in terms of their rights of access to wells. As a modern innovation, it also urged people to sell off barren and old stock, especially when market prices were high, and to save the money in banks as an insurance against future calamities.

At the conclusion of each *Gummii*, clan representatives make known the pronoucements, which will be in force for the duration of the *Gada* in power, to the wider community. The *Gada* political assemblies and *Gummii* legislative assemblies represent the centralised structures of authority, which oversee the institutional arrangements for resource management pertaining at the local level.

Before discussing these arrangements, I will describe the resources that the Borana traditionally held in common.

Communal resources of the Borana

The major resources of Boranaland that are used in its pastoral system of production consist of pasture and water (*marra bissaan*). There exist different sets of rights of access to these resources.

The Borana classify their water resources into ground water (*kaa'ima*) and underground water (*hora*) (Tache 2000: 51*). The first category comprises of surface water pools (*dambala)*, rock catchments (*qarsaa*), springs (*maddoo*) or ponds (*haroo* or *hara*), which may be further subdivided. These are generally temporary sources of water, which are used during the wet season for both domestic purposes and for

watering animals. Access to the first three types is usually open to all (*bisaan saamaa*) (*literal meaning?), whereas restricted rights apply to ponds for which labour has been expended by an individual or group of individuals. These 'ownership' rights are symbolised by the wooden stick (*konfii*) used to dig up the water [16]. The second category comprises of shallow or crater wells (*eelaa adaadii*) and deep wells (*tulla*). These are the most important sources of dry season water, which are critical to the pastoral system. *Konfii* ownership rights to these perennial sources of water are vested in clans (*gosa*) and associated clans (*gosa maalaa*, literally 'clans of the dewlap'), who contribute livestock to feed the labourers in the maintenance of existing and recovery of disused wells. The holder of the *konfii* acts as the custodian or 'father of the well' (*abbaa eelaa*). The Borana perceive the deep wells as being grouped into nine complexes (*tullaa saglaan*), which are concentrated to the south and west of the Dawwaa River (Helland 1980: 62)[17]. Each of these well-fields contains between ten to twenty wells and number about forty in total.

Elected well councils (*kora eelaa*) manage and regulate access to water at these sites and establish the daily watering schedules and priorities of use, under the supervision of the 'father of watering' (*abbaa hiregaa*) (Helland 1980: 65). Although clans 'own' wells, the well council can grant rights of access to members of other clans, based on cross-cutting social ties, such as clan partnerships (*sunsuma*), affinal links (*soddaa*), age-set (*hariyaa**) and generation-set (*luuba**) affiliations, and bond-friendships (*jaala*) (Helland 1980: 66; 1997: 67). Members of neighbouring groups can also negotiate temporary rights of access through the well council. All users are expected to provide labour in the maintenance of the well and to abide by the rules governing its use.

In contrast to water, pastures are communally owned. In theory, all Borana have free access to pastures. In practice, however, these rights are constrained by access to water (Helland 1980; Hogg 1997; Tache 2000: 86*). People therefore tend to graze their animals within fairly well defined territories (*madda*) in the proximity of wells, to which certain rules of use apply (Cappock 1994; Cossins and Upton 1989; Hogg 1990; Tache 2000). These rules are built into their traditional system of production.

In order to avoid concentration of livestock on rangeland, Borana employ four main strategies: herd division, herd dispersal, herd differentiation and rotational grazing. They divide their animals into lactating stock and dry and male stock [**diagram-Cappock**]. The lactating animals (**hawicha* or *looni warraa)* are kept close to the homestead, to feed the family (*warra*). The dry animals (**guuessa* or *looni foraa*) are sent to satellite camps (*fora*), under the supervision of strong, unmarried men, who may only return to the main camp for ceremonial functions. They also divide different categories of livestock, cattle, small stock and camels into separate herds according to their grazing, browsing and watering needs. They herd these animals in different parts of the territory. In particular, they separate cattle and camel herds. In the wet season, when ground water is available, Borana migrate with their main herds to outlying areas of their home range (*madda*). In the dry season, when cattle need to be watered every two to three days and sheep and goats every five days, they draw closer to the wells. This system allows both dry and wet season pastures to lie fallow for a period and to replenish their nutritive value.

Other restrictions on the use of pastures also apply (Tache 2000: 63*). It is forbidden, in the dry season, to settle along paths leading to well-sites (*karaa obaa*, 'paths of watering'), or in the proximity of well-sites, as animals graze in these buffer zones (*mataa tikaa* 'grazing head'), on their way to the wells. The Borana also reserve tracts of range for grazing by calves and other weak and sick animals during the dry season (Oba 1990: 41; Tache 2000: 64). Elders at the neighbourhood level establish such reserved grazing tracts (*kaloo)* at the beginning of the wet season, and open them up during the dry season. It is forbidden to trespass on these tracts, which are regulated by the laws relating to calves (*seera yabbiyee**).

The individual livestock-owning and production units form part of larger, hierarchically ordered, resource management units that together make up the social structure (Hogg 1990; Kassam and Megerssa 1994; Tache 2000). These units operate at different integrative levels to regulate the communal water and pasture resources. They act as decision-making bodies and serve to resolve conflict at the local level. They thus provide the institutional arrangements according which the Borana pastoral system functions.

Resource management units (diagram-Boku)

The smallest unit of the social structure is the household (*ibidda* 'hearth'), which constitutes the primary residential group, based on a married woman and her children. Each woman owns her own milking cows, which are given to her at marriage (Tache 2000).

The households of co-wives form a family (*warra*), headed by a married man, the husband or eldest son, who is the head of the family (*abba warraa*). Their joint livestock holdings form a common herd. The father, in consultation with his eldest adult son, makes all decisions relating to the management of the family herd. Fathers and eldest sons tend to remain with the main family herd, whilst younger sons take dry stock to the mobile satellite camps. The family is the smallest unit of stock management.

Affinal groups, who live together and whose animal enclosures are adjacent to one another, form the second level of management (*shanacha*). This residential group is also known as *moggaa* or *labata*. The eldest male acts as the head (*abba shanachaa*) of the group of families. Members of these groups pool labour and share grazing and watering duties and their respective heads decide when and where to move animals during the wet season.

Single or groups of families who live with other families from different clans make up a village (*ollaa*). Villages may be composed of between ten and thirty houses. They represent the fourth level of management. Each village has a headman (*abbaa olla*), who maintains peace and order. The headman is the first point of contact for visitors, and may represent other family heads at meetings at the locality level. Members of a village form a close-knit community, which cooperates in the tasks of herding, watering stock, and providing security. They share goods and perform ceremonial functions together.

Spatially proximate villages in a particular locality constitute the fourth level of resource management, known as *ardaa*. The locality is usually known according to a prominent natural feature. A council of elders (*jaarsa ardaa*), made up of village representatives, meets on a regular basis to discuss issues relating to pasture, water, and security in the area. The council demarcates the boundaries of a grazing reserve and enforces sanctions against those who trespass them. It also deals with any outstanding social disputes. Members of the locality also periodically perform peace and fertility rituals (*kormaa-korbeessa ardaa)*, which serve to create solidarity between them (Tache 2000: *62).

A number of locality units group together to form the fifth, inter-locality level of management (*reera*). The council of elders enforces the laws relating to the utilisation of ponds (*seera haroo*) in the area and ensures that stockowners do not infringe on the pasture and water resources of adjacent units. It may also recruit labour for the maintenance of ponds and other purposes.

The sixth level of management is the *madda* (from the word for 'spring' or 'source'), a territorial grazing unit associated with a well complex. It 'includes all the people and all the animals who use the wells, in addition to all the all range resources serviced by the well complex' (Helland 1997: 73)[18]. These territorial units vary considerably in resource endowments, and in the past some may have functioned as drought grazing reserves (Cappock 1994: *). Traditionally, its function was to regulate rights of access to and use of water at particular well sites and to the associated rangeland, through an assembly of elders (*kora maddaa*) (Tache 2000; Bassi personal communication). These elders periodically performed libation (*dibbayyuu*) rituals to the ancestors. However, it now represents a parallel administrative unit, through which the government collects taxes, communicates decisions and organizes regional development programmes. The boundaries of these units, which are about five hundred square kilometres in size, were mapped in the 1980s. Such units support about four thousand people, living in one hundred villages, and possessing about one thousand heads of livestock (Cappock 1994: 64).

The seventh level of management is that of the *dheeda* (*'pasturelands'), or sub-regional units made up of the constituent *madda*. They represent the grazing areas, as a whole, both wet and dry season ones (Bassi, personal communication).There are two *dheeda* in Liiban and five in Dirree (Tache 2000). The *dheeda* councils (*kora dheedaa*), which regulate these pasturelands, represent the highest level of communal decision-making below the *Gada* and *Gummii* assemblies.

Changes in the Borana system of resource management

In the past century, a number of externally induced economic and environmental changes have taken place in Boranaland that have considerably undermined its traditional system of resource management. In my discussion of these changes, I draw particularly on the work of Cappock (1994) and Tache (2000). These changes have introduced hitherto alien concepts, linked to the privatisation and commercialisation of common resources, and have given rise to new forms of dispute that the traditional methods of conflict resolution are unable to resolve (Tache 2000). These changes are therefore also social in nature. In addition, a number of political factors have contributed to the transformations that are taking place (Hogg 1997).

In 1897, the Emperor Menelik II, who had been expanding his highland empire with the military assistance of his foreign supporters, occupied the southern highlands of Ethiopia and annexed Boranaland (Goto 1972: 68-70; Holcomb and Ibssa 1990). The Emperor belonged to a northern minority ethnic group, known as Amhara. His generals established an army garrison at Arero in Liiban and imposed Amhara rule on the population. The Borana leaders who had tried to resist this colonial occupation were arrested and deported to the capital (Goto 1972: 68). The two moiety leaders were co-opted and appointed as officials in the administration to collect taxes from the people, mainly in the form of livestock. At least five different forms of taxation were imposed, which were aimed at expropriating large numbers of cattle from the Borana. They were also forced to provide unpaid labour to the officers, to transport food and to assist in the construction of barracks and other administrative buildings. The Borana, who unlike their adversaries, were not armed, decided not to resist the new regime. Instead, many Borana took refuge over the border, in what was to become Kenya under British administration, an area that had long formed part of their dry season pastures. They also moved into the area of Mount Marsabit in three different waves, eventually ousting the Samburu (Legesse forthcoming). At the request of the Abyssinians, the British authorities repatriated many of these refugee communities, although this policy was not systematically implemented, due to humanitarian concerns (give Zaphiro ref.?). Some British officials also resorted to burning down Borana villages on Mount Marsabit in order to force them to leave (Legesse forthcoming).

However, Abyssinian occupation did not radically change the Borana way of life. The most far-reaching changes in their system of production began to take place from the mid-1960s, through World Bank, USAID and other donor funded rangeland development projects (Cappock 1994: 23ff;Tache 2000: 86ff*) under the Haile Selassie (1930-35; 1941-74), and the Dergue (*1975-1991) governments. The First Livestock Development Project (1958-63), focused attention on the highlands, and did not affect Borana significantly. In 1965, some infra-structural development took place as part of a pilot phase that led to the Second Livestock Development Project (SLDP). It created twenty large permanent water ponds in order to improve access to rangeland in the vicinity of the town of Yaaballoo. This initiated a movement of people and livestock to the area, which resulted in degradation of the range**. The SLDP (1973-81), which aimed at creating commercial links between highland and lowland areas, began to build the necessary infrastructure, such as roads, slaughterhouses and markets. A consultancy firm, AGROTEC/CRG/SEDES Associates, carried out surveys of the southern Borana rangelands to collect data on population demography, vegetation, water resources, socio-economics and animal husbandry. These reports led to the formulation of the Third Livestock Development Project, which began in 1975 (*and is still ongoing in Borana?). It had three sub-projects, one of which was the Southern Rangelands Development Unit (SORDU), which focused on Borana. SORDU has eight project components: range management, water development, livestock health, construction of roads, state-owned ranch development, smallholder fattening programmes, training, trials and studies. The International Livestock Centre for Africa (ILCA) was responsible for undertaking research. The NGO, CARE-Ethiopia, provided extension services to the communities. A Fourth Livestock Development Project began in 1988, but focused on the highlands. However, it allocated funding for a pilot project in which a more participatory approach could be

taken to pastoral development, based on traditional structures and systems of authority, and in which service cooperatives introduced earlier by the government could be adapted to meet the perceived needs of the communities (cf. Hogg 1990) [*what became of this pilot project?]. Some of the impacts of these development interventions on the Borana pastoral system are discussed below.

As elsewhere in Eastern Africa, commercial ranches, based on the Western model and value system, did not have the desired outcome in Borana and led to a number of negative consequences for the communities. SORDU established three ranches, at Sarite (17,000 hectares) in Taltallii District, at Dambalaa Waacuu (12, 000 hectares) in Dirree District, and at Waleensuu (25, 000 hectares) in Liiban District (Cappock 1994: 34; Tache 2000: 73ff). This project component aimed to increase livestock off-take, to generate income from livestock sales for local development and to demonstrate modern methods of range management to pastoralists. In 1985, the Ethiopian Livestock Purchasing Enterprise (ELPE) under the Ministry of State Farm Development established livestock holding ranches at Suruphaa (4000 hectares) in Yaaballoo District and at Diidaa Liiban (4000 hectares) in Liiban District. It also opened two purchasing centres, at Yaaballoo and Nageellee, which ran a mobile service to buy livestock from local markets. The Ministry of Agriculture established another ranch, for the purposes of preserving the Borana breed of cattle, at Diida Xuyyuuraa in Yaaballoo District (Tache 2000: 73ff*).

The case of the ELPE ranch at Diidaa Liiban is an instructive one of the kinds of problems that were encountered (Tache 2000: 75-78). It represented one of the best grazing areas in the district. Its creation blocked the access to the only perennial source of water, at Lagaboora Dam. It also enclosed agricultural land and displaced the farming and herding villages in the area. Moreover, the location chosen for the ranch was a ceremonial one, which contained eleven sacred sites. Government officials overruled the objections to the proposed ranch made by the *Gada* delegations and members of the community, on the grounds that following the Land Proclamation Act of 1975, all land belonged to the state. Members of the community reacted violently to the fencing of the land for the ranch, but were unable to prevent it. In 1991, after the fall of the Dergue regime, the ranch, like a number of others, was extensively looted and the community reclaimed the land. In 1997, however, as part of the economic liberalization policies introduced by the new EPRDF government, the ranch was sold to private investors, resulting in the expulsion of the communities who had resettled there.

None of the SORDU ranches achieved their objectives. They did not prove to be either financially or environmentally viable, did not succeed in promoting off-take of livestock, or in demonstrating market principles to the Borana, who persisted in their own strategy of selling old unproductive and sterile animals rather than immature males (Oba 1998: 51). As Cappock (1994: 2) comments, for the Borana, cattle are primary economic assets, which have deep-seated social and cultural values rather than purely monetary ones. SORDU had intended to return the ranches, when they were functioning well, to the community (Cappock 1994: 35). However, after the current government came into power in 1994, members of the community were forced to bid for and to buy back their own land, such as the Dambaala Waacuu Ranch in Dirree District (Tache 2000:*74).

The water development activities undertaken by SORDU encountered a number of technical and social problems (Cappock 1994: 202ff). Between 1976 and 1986, it constructed 12 ponds in the three ranches, but was unable to resolve the seepage problems. This lack of water was a major contributing factor in the failure of the venture. It also initiated 83 ephemeral ponds in other parts of the area in order to improve access to under-utilised rangeland and to extend wet season grazing, without causing environmental damage. Most of these did not also prove to be sustainable, due to silting, seepage, and lack of maintenance by the community, which did not consider them as communal assets. In contrast, between 1987-1990, SORDU received and responded to requests by the community to assist in the maintenance and re-excavation of wells, using heavy machinery. This work was paid for through monetary and labour contributions by the Borana themselves, who had a vested interest in the activity. It also undertook other well-related work, to which the community responded positively. Another aspect of water development, which only indirectly related to the project, was the construction of water storage tanks, primarily for domestic use, but also for watering calves. This was initiated by CARE-Ethiopia from 1986 as part of its extension work with women. These cisterns subsequently became very popular among the Borana. The wealthy local entrepreneurs, who generally funded these semi-permanent structures, saw them as modern symbols of their status and prestige (Cappock 1994: 207). However, this innovation has given rise to a number of property rights issues in respect to water. Such cisterns, whether individually or group-owned, are considered to be private property and the water harvested has become a marketable commodity, which can be sold. This new phenomenon is considered to be 'out of Boorana custom' (*aada-malee*) (Tache 2000: *68).

Both ranching and the construction of water-tanks may be contributing to processes of sedentarisation in Borana, which in turn are affecting traditional property rights (Tache 2000: *68ff). According to Tache (2000: *81) many of the people displaced by the state ranches, have resorted to farming in the adjoining areas, partly as a supplement for their herding activities, but also as a means of securing rights over the land. Tache (2000: *81) notes: 'With the apparent erosion of the common property over the rangelands, the displaced have come to consider farming as a mechanism to institute new types of right to land which may prove more difficult to alienate'. This and other types of enclosures of common land for farming have introduced the hitherto alien concept of private property (*lafa kiyyaa*, 'my land') (Tache 2000: 71). In some areas, such as Diidaa Haraa, families have fenced large plots of land for cultivation and grazing. This trend towards the individualisation of land by Borana is further aggravated by the establishment of group ranches by non-Borana business men, such as the one proposed at Meelbanaa (Oba 1998). This initiative has involved the participation of rich local pastoralists, who served as an entry point to gain access to the land (Tache 2000: *73). [+resettlement policies].

In respect to the water-tanks, the extent of sedentarisation is less clear and needs to be further documented (Cappock 1994: 207). However, as Tache (2000: *71) shows, in some cases such water cisterns are also being used as a pretext for land enclosure. In Diidaa Haraa and Goorile, land has been enclosed both by the community and by individuals around the cisterns. The latter graze their own animals within the enclosure and prohibit other members of the community from gaining access to the pasture. As noted above, some of these cistern-owners are also selling the water

contained in the tanks. However, such developments are far from uniform. In these and other areas, communities continue to share such water on a more equitable basis and to manage it according to traditional methods through committees of elders (Tache 2000: *70). The charges levied are made for purposes of maintenance rather than for profit.

These combined processes have contributed to the alienation of large tracts of land from the pastoral system in some of the best endowed areas, thus putting more pressure on the remaining pastures. This has led to environmental degradation. As a result of heavy cattle grazing, 19% of the area has suffered soil erosion, and woody vegetation has encroached on 40% of the land (Cappock 1994: 1). The problem of bush encroachment may have been aggravated by the government ban on the traditional strategy of firing pastureland between 1974-1991. This degradation and the lack of nutritive grasses have severely affected cattle productivity and animal health and resistance (Tache 2000: *71). Traditionally, only valley bottoms were used for farming. The extension of farming to the uplands has also significantly affected the soils in these areas (Cappock 1994: 1). It is reported that the cattle now exceed the carrying capacity, which is estimated to be about twenty animals per square kilometre in the high-density phase, with a mean average of sixteen head (Cappock 1994: 39; 50). The 'safe' carrying capacity is thought to be fourteen head per square kilometre. This overstocking is attributed to a number of factors, such as better veterinary care, but does not take into account the processes of land alienation, which is a political issue. At the same time, the ratio of cattle to numbers of people has declined, and the resulting reduction of milk per capita means that the majority of Borana are now no longer able to feed themselves based on their traditional methods of production. Recurrent drought has also contributed to the pauperisation of the Borana. In 1990-2 drought, they lost between 70% to 80% of their cattle, as well camels, small stock, donkeys and horses (Futterknecht 1997: 175). This followed the heavy losses that were sustained in the 1983-4 drought*. Cappock (1994: 3) estimates that 51% of households may now be considered to be poor. Rich livestock owners possess 65% of the regional cattle; middle-class herders own 25%, whilst the poor only own 10%. The traditional welfare system (*buusaa gonofaa*) of restocking destitute members of the community based on contributions at clan assemblies (*kora deebanuu*) is no longer able to cope with the mounting problem (Cappock 1994:3; Helland 1997: 74; Tache 2000: *).

For Cappock (1994), this general crisis of the pastoral system can be attributed to the classic problem of overpopulation, as expounded by Hardin (1968). It is the main thesis advanced by the ILCA report. Preliminary research indicates that human population may be increasing from a low 1-1.5% per annum to a net rate of 2.5%-3% per annum (Lindtorn 1991). The reasons for this rise in population have not been precisely determined. It is hypothesized that this growth rate could be due to some or all of the following factors: improved food supply and medical services; lack of adherence to traditional *Gada* rules of regulating fertility; interference of such rules by external agencies, such as the government ban on 'infanticide'; cyclic malfunctioning of *Gada* rules (Cappock 1994: 40). Bassi (1997; personal communication) opposes these findings. He concedes that there may be a low rate of natural increase among the Borana. However, he proposes external, rather than internal causes for the rise in population. Firstly, he suggests, it stems from the historical migration of highland settlers into the region, as well as of other ethnic

groups, such the neighbouring Somali, Burji, Konso and Garre (cf. Haberland 1963: 338). Secondly, he argues that the population figures may be inflated due to the policy of the UNHCR, which has been 'repatriating' large numbers of refugees from neighbouring countries, who are claiming Borana identity based on the criterion of shared language, but who belong to other ethnic groups, such as Garre, Gabra and Somali. Bassi (1997: 39) estimates that in Moyale district alone, the returnees exceeded the local inhabitants by 280%.

Bassi (1997) suggests that this influx of refugees is putting pressure on the already diminishing resources and is aggravating previous forms of interethnic conflict (Bassi 1997). These inter-related problems of land alienation and of interethnic conflict have been further compounded by the current government policy of redrawing the territorial boundaries as part of the creation of the new ethnic-based regions. Through this process, Borana have lost two strategic wells, those of Eela Goof and Eela La'ee, to the Garre, as well ceremonial sites (Bassi forthcoming-*ref.; find out what has happened in Regions 4 and 5). The Borana can no longer defend this loss of territory through traditional means, such as warfare.

Nor does the traditional law have rules for dealing with private property issues (Oba 1990: 41). It cannot, therefore, deal with many of the new types of dispute that have arisen (Tache 2000: 71). The *Gummii* Gayyoo, as already noted, has condemned a number of the environmental malpractices and lack of conformity to the customs. However the traditional authority structure has been superseded to a large extent by that of the State, which advocates a different set of values to traditional ones. This situation has led to changes of an endogenous nature. For example, some *Gada* officials have become corrupt and often neglect to carry out their customary duties; the caretakers of wells are taking bribes in establishing watering rotas. As in many other traditional communities that are undergoing rapid transformation from a subsistence-based system to a market-oriented one, there is a widespread problem of alcoholism. In 2002, in an attempt to reverse this negative trend, the *Abba Gadaa,* Liiban Jaldessaa, who took power in 2000, placed a community-wide ban on the consumption and sale of alcohol at ritual performances and at community assemblies and threatened all those who violated this decree with supernatural sanctions (Cynthia Salvadori; Boku Tache, personal communications). Many Borana attribute their current experiences to the breakdown of custom and tradition.

Conclusion (*provisional; needs to be elaborated and strengthened)

The Borana now face a crisis of livelihood (Bassi 2002: 7). This crisis can be attributed largely to exogenous factors, brought about through the development interventions that sought to 'modernize' the traditional livestock sector from the 1960s and to integrate pastoralists into the national and international market economies. This process has undermined the traditional system of resource management through which the Borana subsistence economy had been able to historically withstand numerous environmental crises. It reduced once rich pastoralists to poverty. It has also led to disquieting ecological changes. This system of resource management was based on a common-property regime, which operated through a number of hierarchically arranged units that formed part of the traditional social structure. These institutional arrangements regulated access to the key resources of water and pasture at both the local and territorial levels, based on a high level of

consensus and compliance between the users. These assemblies also served to resolve conflict. This system of resource management was based on the rule of law. These laws were highly codified, and included an elaborate set of environmental laws, known as the laws of the 'outside that is part of the inside'. The laws were reviewed every eight years as part of the political process. Democratically elected political leaders maintained law and order in the territory and were in charge of overseeing the functioning of the system of resource management. Like the religious leaders, they were responsible for keeping the 'peace of the Borana'.

The description of the Borana system of resource management presented in this paper appears to be at variance with the views of Helland (1996; 1997). Helland maintains that the Borana did not have an explicit system of resource management. He writes: 'It is argued that natural resource management in Borana, to the extent that it is possible to speak of management in any conventional sense at all, is a feature of Borana society which arises as a result of the pursuit of other goals (Helland 1997: 57). He also argues that the organization of the use of water at wells is not about resource management, but merely a question of tradition (Helland 1997: 76). He rightly notes that 'Ultimately natural resource management decisions are political decisions, and must be made and implemented by political means (Helland 1997: 77). However, in an earlier study, he suggests that the Borana pastoral system was an unviable one, precisely because its political system lacked the military capacity to protect communal resources from outside infiltration, in particular by the Somali (Helland 1996: 148).

This paper argues, that on the contrary, the Borana traditionally had a highly developed indigenous system of resource management and possessed the socio-economic, political, legal and military institutions to manage and defend their territorial resources. It suggests that this system of management formed an integral part of their world-view, which was based on distance, respect and a harmonious relationship between all things, including Nature, custodial rights to key resources affecting the community and equitable access to those resources by the users. These ideals continue to be explicitly and consciously articulated by Borana men of knowledge and keepers of the oral tradition. These attitudes to Nature can be described as a traditional 'eco-philosophy'.

However, further research needs to be carried out on this indigenous system of management, on the institutional arrangements that operate at different levels, on the environmental laws and assemblies, and on the traditional means of regulating fertility and population growth. More work also needs to be done on how ecological data and events are recorded and transmitted through the Borana historical traditions.

Despite their differences of theoretical orientation and interpretation of the data, most of the scholars who have studied the Borana pastoral system, agree that the traditional social order should remain the point of departure for all future development projects (Bassi 2002; Baxter 2001; Cappock 1994; Dahl and Megerssa; Helland 1997; Hogg 1990; 1997; Kassam and Megerssa 1994; Legesse 1986; forthcoming; Oba 1996; Tache 2000). These projects should involve the Borana themselves, and should be based on their 'ethno-development' (Kassam 2002). They should cease to treat the Borana as 'cattle producing machines' (Maud 1904: 569). In short, 'rebuilding sustainable livelihoods…must start from the full recognition of traditional, ethnic-

based knowledge, skills, norms and institutions, and from the respect of the customary rights of the autochthonous people' (Bassi 2002: 12).

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NOTES

[1] On this 'mainstream' view, see Sandford (1983: 11ff).
[2] Borana date the beginnings of cultivation in their land to the *Gada* of Aabbuu Lakuu which corresponds to 1659-67, in the chronology of Legesse (1973: 190) and 1648-1656 in that of Tache 2000: 132). See below for this system of dating events.
[3] This approximate estimate is based on the 1994 Ethiopian government Household Census, which gives the figure of 200,000. The Kenya National Census of 1999 did not disaggregate data by ethnic group, but a household survey conducted by the Catholic Church in 1989 estimated the population of Borana in Marsabit District to be 200,000 (Tablino 1999: 19). Borana living in Isiolo District can be estimated to number some 50,000 people [check Hogg?].
[4] Oromo is the name the people give themselves. In the early ethnographic literature, they are known as 'Galla', a name they repudiate due to its pejorative connotations.
[5] According to oral traditions, this took place in the *Gada* of Abbayyii Baabboo Horroo, which Bassi (1997: 25) dates as 1656-1664, and Goto (1972: 29) as 1657-1665, following Haberland's (1963:11-12) chronology. In Legesse's (1973) chronology, this period corresponds to 1667-1674. Bassi's version has been adjusted to take into account the intercalary month that the Borana add to their calendar years.
[6] These ethnic 'labels' may not have emerged until later.
[7] As Baxter (1978: 167) notes, 'The Peace of the Borana consists not only of preventing internal strife and fostering active cooperation between men, but also maintaining proper relationships between men and God, so that blessings of the latter, which are manifested particularly in rain and the fertility of stock and women, continue to flow.'
[8] According to the different chronologies, the Laikipia war took place in the *Gada* of Addii Doyyoo, dated by Haberland as 1897-1905 by Tache as 1896-1904; and by Legesse as 1899-1906.
[9] Borana attribute the current version to the leader Gadayoo Galgaloo, who ruled between 1456-1464. This precise date is not provided in the chronology compiled by Legesse (1973: 190), but is indicated in that of Tache (2000: 132).
[10] See also Hinnant's (1978) study of the Gujjii Oromo ritual system.
[11] See Robinson (1985) on the ecological data contained in the Gabra Oromo cycles of historical computation.
[12] Legesse (1973) describes this practice as 'infanticide'. In interviews with both Kassam and Megerssa, Dabassa Guyyoo explains, however, that such children were 'given away' to Waata hunter-gatherer communities. On this point, see also Baxter (1978: 176).
[13] See Bassi (1996) for a discussion and critique of this demographic thesis.
[14] Gemetchu Megerssa, interviews with Borana oral historians, Bule Guyyo and Dabassa Guyyo, Kenya 1985-1990*. The data for this paper is mainly drawn from an interview on environmental conservation with Dabassa Guyyo, in July 1988.
[15] Unfortunately, at the time of writing, I did not have access to the report given of the 1996 assembly by Huqqa Golloo (1997). As far as I know, no description has ever been given of the *Gummii* Eela Dalloo, which constitutes an important gap in the research.
[16] As Helland (1980: 65) notes, 'ownership' should not be understood as 'possession' in the Western sense of the word. These rights represent, rather, a form of custodianship or trusteeship. Helland explains that in Borana, *konfii* rights are patrilineally inherited and are held in perpetuity by the clan in which they are vested. They can also be exercised *in absentia* (Tache 2000: *).
[17] Bassi (1997: 25) lists these wells as those of Melbana, Irdaar (also called Egdar), Goof, Lei, Dhaas, Weebi, Wachile, Higo and Gayyoo.
[18] There has been considerable discussion about the status of *madda* between scholars. For Hogg (1990) and Bassi (personal communication) it is a management unit, whilst for Helland (1997: 73), there is no evidence to consider it as one.