

Project no: 028827

Project acronym: GEM-CON-BIO

Project title: Governance and Ecosystems Management for the CONservation of BIOdiversity

GEM-CON-BIO Case Study Report

Borana-Oromo Community Conserved Landscapes, Ethiopia

CENESTA



Marco Bassi and Boku Tache <u>bassimarco@tiscali.it</u> <u>bokutachedida@yahoo.com</u>

Cenesta

July 2007 70 pages

Contents

A. GENERAL INTRODUCTION ⁷	3
B. QUESTIONNAIRE SUMMARY	5
C. RESEARCH QUESTIONS	6
 1.1 NATURAL CAPACITY 1.2 SOCIO-ECONOMIC AND CULTURAL CAPACITY 1.3 GOVERNANCE CAPACITY	12 16 19 24 28 33 36 38 42 46 47 47 48 49
D. GOVERNANCE TYPE ASSESSMENT AND OVERALL CONCLUSIONS	51
E. ABOUT THE CASE STUDY METHODOLOGY	54
F. PHOTOS	54
G. REFERENCES	55
H. ANNEXES	56

A. General introduction

The Borana Conserved Landscape provides an outstanding example of territory managed in a sustainable way through customary institutions and according to customary laws, not formally recognized by State actors. The landscape hosts a rich biodiversity, including 4 restricted-range species of birds.

The incorporation into modern Ethiopia since 100 years, modernization and globalization are producing external and internal threats to the efficacy of this governance type at a progressive intensity. Formal (or conventional) protection of certain habitats by the government since 30 years has proven to be totally ineffective, and it was only improved over the last 8 years by introducing collaborative management in three State forests.

The Borana Conserved Landscape is a case of Community Conserved area posing specific demands in terms of documentation, analysis, policies and actions required. It includes areas where conventional conservation and collaborative management have been implemented. It therefore will contribute to the definition of appropriate policies by the European Union.

Two different time periods have been adopted for the analysis. The large landscape was analyzed on a one hundred year time period. This time period corresponds to the lost of political autonomy by the indigenous Borana people and to the progressive marginalization of customary governance. Contrary to the general GEMCOMBIO model, we are not evaluating what gain in biodiversity conservation was achieved by introducing a new governance model, but what loss was produced by the process of weakening of the pre-existing and ancient governance. This reversal of the overall research assumptions has several implications in term of general comparative analysis, and should be kept into consideration especially in relation to certain questions such as 4.1.1 and 4.1.2.

The second time period is 8 years, the time of existence of SOS Sahel project for introducing of collaborative management in the State forests. The reader should keep in mind that the Yaaballo Wildlife Sanctuary, included in the general statistics of question 1.1.7 as an area explicitly managed for conservation of biodiversity (by the government), was not considered meaningful as a governance model, having failed to reach any practical objective. It was therefore left out of the time analysis.

Wherever relevant, answers contain a clear distinction between these two levels, the landscape, for which the elders are just now starting to introduce provisions for the specific protection of bio-diversity as a result of this third country action-research, and the State protected forests, where SOS Sahel has introduced collaborative management agreements.

The case study took longer than originally planned, both in terms of field work and compilation of documentation. The action research was implemented in three phases:

1. Planning in Rome by the two researches, preliminary review of questionnaire and of the data and information missing.

- 2. First field work by Marco Bassi for collecting data and documentation, preliminary discussions with various customary leaders (various meetings were held), NGOs, governmental actors and donors.
- 3. Main field work by Marco Bassi and Boku Tache, to hold the participatory workshop, collect additional documentation and data, filling the questionnaire, follow up discussions with elders and customary leaders.

The review of policy and legislation (a central theme of the participatory workshop) was particularly demanding.

Question 1.2.3 was only partly answered, due to lack of reliable statistics.

Question 1.2.3a was not answered for lack of reliable data.

Questions 3.2.2 and 3.2.3 were not answered due to absence of market tools I the study area.

B. Questionnaire Summary

Please tick the questions answered¹

1.1.1 (C)	Y	1.4.1 (C)	Х	216(0)	Y	4.1.4a (C)	Х
1.1.1a (C)	X	1.4.2 (C)	Х	2.1.7 (O)	X	4.1.5 (C)	Х
1.1.2 (C)	Х	1.4.3 (C)	Х	2.1.8 (C)	Х	4.1.6 (C)	Х
1.1.3 (C)	Х	1.4.4 (O)	Х	2.1.9 (C)	Х	4.1.7 (C)	Х
1.1.4 (O)	Х	1.4.5 (O)	Х	3.1.1 (C)	Х	4.2.1 (C)	Х
1.1.5 (C)	Х	1.4.9 (C)	Х	3.1.5 (O)	Х	4.2.2 (C)	Х
1.1.6 (C)	Х	1.4.10 (C)	Х	3.1.6 (C)	Х	4.3.1 (C)	Х
1.1.6a (C)	Х	1.4.11 (C)	Х	3.1.7 (C)	Х	4.3.2 (C)	Х
1.1.7 (C)	Х	1.4.12 (C)	Х	3.1.8 (C)	Х	5.1.1 (C)	Х
1.1.7a (C)	Х	1.5.1 (C)	Х	3.1.9 (C)	Х	6.1.1 (C)	Х
1.1.8 (O)	Х	1.5.2 (O)	Х	3.2.1 (C)	Х	6.1.2 (C)	Х
1.1.9 (O)	Х	1.5.3 (C)	Х	3.2.2 (C)		6.1.3 (C)	Х
1.2.1 (C)	Х	1.5.4 (C)	Х	3.2.3 (C)		6.1.4 (C)	Х
1.2.2 (C)	Х	1.5.5 (C)	Х	3.3.1 (C)	Х		
1.2.3a (C)	Х	1.5.6 (C)	Х	3.3.2 (C)	Х		
1.2.4 (C)	Χ	1.5.7 (C)	Х	3.3.3 (C)	Х		
1.2.5 (C)	Х	2.1.1 (C)	Х	3.3.4 (C)	Х		
1.2.6 (C)	Х	2.1.2 (C)	Х	3.3.5 (C)	Х		
1.2.7 (C)	Χ	2.1.3 (C)	Х	3.3.6 (C)	Х		
1.3.1 (O)	Х	2.1.4 (C)	Х	3.3.7 (C)	Х		
1.3.2 (O)	Х	2.1.5 (C)	Х	4.1.1 (C)	Х		
1.3.3 (O)	Х	2.1.5a (C)	Х	4.1.2 (C)			
1.3.5 (O)	Х			4.1.3 (C)	Х		
1.3.6 (O)	Х			4.1.4 (C)	Х		

¹ Any compulsory question not answered should be justified in the conclusions

C. Research Questions²

1.1 Natural Capacity

1.1.1 (C) What is the size of the study area

The study area corresponds to the customary territory of the Borana-Oromo. From 1991 this territory has decreased, due to a process of administrative reshaping with dislocation of the indigenous Borana community. The remaining territory here considered is 45,620 Km², corresponding to the sections of the Borana Zone and Guji Zone of Oromia Administrative Regional State, Ethiopia, currently inhabited by the Borana, more specifically: Liban district, in Guji Admistrative zone $(2/3^{rd})$ of it, in the southern section) Yaaballo district of Borana Admistrative Zone (excluding a strip in the north) Areero district of Borana Admistrative Zone Borbor district of Borana Admistrative Zone Dhaas district of Borana Admistrative Zone Dirre district of Borana Admistrative Zone Mio district of Borana Admistrative Zone Dillo district of Borana Admistrative Zone Moyale district of Borana Admistrative Zone Taltelle district of Borana Admistrative Zone

1.1.1a .(C) Does it encompass a coherent management unit (ecosystem)?

Yes.

It is a coherent management unit used for pastoralism by a single mobile indigenous people (the Borana) incorporating other pastoral groups. It includes diverse habitats at different elevations, with different rainfall and vegetation type:

- 1. Grassland
- 2. Acacia-Commiphora open woodlands and bushlands
- 3. Juniperus procera forest and woodland (patches)
- 4. Scattered thorny deciduous shrubs and short acacia steppe, with grass tufts

Within the landscape small towns, serving as administrative centers, exist, and prevalently small holding agriculture is practiced around main towns, in some districts with highest rainfall and in bottom valleys.

² Please use the boxes under each question for the reply and any relevant comments. In case you attach additional documents, please make a reference within the box. Please, feel free to use more space than what is indicated in the box, if you find it necessary.

<u>1.1.2 (C)</u> What are the most important habitat types in the area (How many, list, rank)

Grasslands and lands dominated by forbs, mosses or lichens:

<u>Subcategories:</u> Dry grasslands: 14% of total Sparsely wooded grasslands: 70%

Regularly or recently cultivated agricultural, horticultural and domestic habitats: 12% of total.

Woodland, forest and other wooded land: <u>Subcategories:</u> Coniferous woodland: 1% of total Mixed deciduous and coniferous woodland: 2% of total

Constructed, industrial and other artificial habitats Subcategories:

Buildings of cities, towns and villages: 1% of total Transport networks and other constructed hard surface areas: only one asphalt road, hence irrelevant

$\underline{1.1.3}$ (C) What are the main ecosystem services of the area vital for human well-being

1.1.2. Livestock
1.1.1. Crops
1.2.1. Timber
1.2.3. Wood fuel
3.1. Cultural diversity
3.2. Spiritual and religious value
3.3. Knoweldge systems
3.7. Social relations

3.9. Cultural heritage values

1.1.4 (O) For each identified ecosystem service, identify any change in the delivery of that service over time

1.1.2. Livestock: Heavily reduced due to expansion of agriculture in drought fall-back areas 1.1.1. Crops: Increased from non existent to present level, practiced by immigrants as well as by destitute pastoralists

1.2.1. Timber: Extraction grew over the last 30 years for house construction in local towns, to the point of nearly total destruction of the forests (formally protected by the State) and, specifically of the *Juniperus procera*. Over the last 7 years an SOS Sahel Collaborative Forest Management Project has stopped the trend (Boku and Irwin 2003).

1.2.3. Wood fuel: Still easily available to both rural and town population

3.1. Cultural diversity: reducing due to impact of State educational system

3.2. Spiritual and religious value: Ceremonial grounds nearly totally taken over by agricultural expansion

3.3. Knoweldge systems: indigenous knowledge system still strong in rural areas, where modern education is only a recent phenomenon (last 6-8 years). Low quality of education even in urban context

3.7. Social relations: Social relations patterns are built upon the natural resources and the organization of production, but the globalizing and market factors are seriously affecting them and their social efficacy.

3.9. Cultural heritage values: The traditional wells are still properly maintained and improved, but they are losing relevance due to their progressive substitution with boreholes promoted by the government and financed by international actors. The entire system of water grazing rights is seriously affected: larger shares progressively taken by town traders and investors at the expense of subsistence of poor rural pastoral families.

<u>1.1.5 (C)</u> What are the major threats and driving forces facing the area being studied

1.1.1.2. Small holding farming

1.3.3.2. Selective logging (in forests)

1.5. Invasive alien species (in sparsely bushed grasslands)

- 1.6. Change in native species
- 1.7. Fires (only in forests, one very destructive episode in 1999)

<u>1.1.6 (C)</u> What are the external drivers impacting the management of ecosystems in the study areas?

1.1. Population growth mainly due to uncontrolled immigration and inappropriate refugee's policies (Bassi 1997)

1.3. Inappropriate development policies, not recognizing common holding and water rights and promoting agriculture, investment (especially in private ranching), individualization and privatization of common resources in general. Shrinking of the customary territory of the indigenous people

2.1. Habitat Change, due to agricultural encroachment in grazing land, inappropriate development of water points having no provision for restricted access to the rangeland as in the customary modality

2.4. Invasive species

1.1.6a (C) What main types of land use are present in the area?

The 3 largest forests are protected by the State and currently under collaborative management agreement. A limited amount of logging is allowed for house construction in towns. The forests provide medicinal herbs, ritual plants, regulate climate, and are used as fall-back areas during droughts.

Sparsely wooded grasslands and dry grasslands, the largest area, used as grazing.

A few governmental and private ranches exist in this habit, and an increasing number of wealthy individuals of the indigenous people are enclosing rangeland for private use

The wetter part of this lands and cleared forest areas are used for small holding agriculture, mainly for subsistence, but including a portion of commercial farming. Most areas around major towns are fully cultivated, blocking the passage of herds.

Towns are expanding (but still small) on the basis of to town plans. Land holding certificates are allocated to individuals for house construction in towns.

The crater lakes are legally State property. Herders and middleman pay a tax to extract different types of salts for human and livestock consumption

<u>1.1.7 (C)</u> What proportion of the area is explicitly managed for the conservation of biodiversity?

Only the three largest Juniper forests and Yaaballo wildlife sanctuary (as a representative sample of the Acacia-Commiphora open woodlands and bushlands and the associated fauna) have explicitly been managed for the conservation of biodiversity, hence about 2-3% of the territory. (-1)

The rest was under an informal combination of customary governance (and customary rules) and governmental regulations, mainly designed for livelihoods. The customary governance, dealing with the pastoral components, is fully compatible with biodiversity conservation. It provides for the sustainable use of natural resources and also contains specific religious-based provisions of protection of certain animal categories, such as birds and snakes, specific tree species, and ritual and medicinal herbs.

In July 2007 the customary leaders have explicitly announced the intention to manage the natural resources of the entire territory for the conservation of biodiversity, as well as pastoral sustainable livelihoods (see annex 1, Yaaballo Statement on the Borana Conserved Landscape). This resolution need to be sustained with capacity building and legal recognition to assure its efficacy in relation to other sector of society and to the external drivers of change impacting biodiversity. If properly implemented the entire territory would be protected, with the exception of urban areas (+2).

1.1.7a (C) Is all or part of the area recognized as a protected area by the governmental agencies? If none, is it otherwise protected by the government or by other actors

Only the three largest Juniper forests and Yabello National Sanctuary (as a representative sample of the Acacia-Commiphora open woodlands and bushlands and the associated fauna) are recognized as a protected area by the government agencies. 2-3% of the territory under consideration.

In order to have the entire territory managed as an effective protected landscape, *ad hoc* legislation need to be developed in Ethiopia for the recognition of Community Conserved Areas and or recognition of the pastoralists' common tenure and water rights.

1.1.8 (O) What is the change in state of monitored species (e.g. Birds) in the area

Restricted-range Prince Ruspoli's Turaco (*Tauraco ruspolii*): was reported common in 1995, declining in 1995, still present but with a dramatic habitat degradation in 2003 (Borghesio et al. 2004). (-2)

Restricted-range Abyssinian Bush Crow (*Zavattariornis stresemanni*): A recent road-side count indicates a population decline of 80 % since1989, probably due to agricultural encroachment and bush intensification (Borghesio and Giannetti 2005). (-2)

Restricted-range White-tailed Swallow (Hirundo megaensis): Data non available

Restricted range Sidamo Lark (Heteromirafra sidamoensis): Data non available

The elephants (common at the beginning of last century) had entirely disappeared from the Borana landscape for more than 50 years, but a family was recently seen, protected and monitored by the elders for a couple of weeks, before it left the area southwards along the Dawa river valley. (+1)

Juniper procera forest had nearly disappeared under governmental management, now stable under collaborative management agreement. (-1)

Overall rating: (-1)

1.1.9 (O) What is the change in state of monitored habitats in the area

Forest patches have either disappeared or nearly disappeared, except the three largest ones under collaborative management. (-1)

Agriculture is encroaching in the habitat of some restricted range birds (found only in the Borana landscape), with fragmentation of the original vegetation type, associated to pastoralism. (-1)

Bush is getting either more dense or encroaching in grasslands. This affects the availability and composition of grasses, with repercussions on pastoralism, herbivorous and birds. (-1)

Overall rating: (-1)

1.2 Socio-economic and Cultural Capacity

1.2.1 (C) What is the current ownership structure in the study area

1. National and Federal: 100%

In Ethiopia land is owned by the State, but there are different arrangements in land use, such as individual title (close to private ownership) granted in urban areas, or use right or lease of land granted by the government.

Within these arrangements urban and cultivated lands might be assimilated to private ownership, while forests and rangelands can de facto be considered under common property. Keeping these secondary use rights into account, the following structure can approximately be outlined:

6. Common: 87%

7. Private: 13%

1.2.2 (C) What is the population size and density of the study area

524,630 (census 1996/7)

Density: 11.5 persons per square km. (census 1996/7)

A new census is currently ongoing

<u>1.2.3 (C)</u> What is the average per capita income (additional information by sector if possible)

This information is not available with reference to the specific location.

The GNI (Gross National Income) per capita in 2005 is \$ 160.00, Atlas method. (Source: Ethiopia Data Profile, World Bank)

In absolute terms this is very low (-2), but the average annual growth is relatively good (1.3% in the period 2000-2004) (Source: World Bank 2006).

Additional data by sector are not available.

1.2.3a. How does the local per capita income compare to national value?

Information not available

<u>1.2.4</u> Which ethnic groups are present in the area, which languages are spoken?

Borana is the main group, speaking Oromo.

Other pastoral groups are

- Gabra Miigo (speaking Oromo)
- Marehan (speaking Somali)
- Guji (speaking Oromo), neighbors, occasionally encroaching,
- Garri (speaking Oromo and Somali), neighbors, occasionally encroaching
- Degodia (speaking Somali), neighbors, occasionally encroaching

The following ethnic groups are mainly engaged in agriculture:

- Burji (speaking Burji)
- Konso (speaking Konso)
- Oromo from different areas immigrated at different times

Other urban groups:

- Amhara (speaking Amharic)
- Ethiopians of various linguistic background, speaking Amharic

1.2.5. Do the communities consider themselves indigenous peoples (if yes, which one(s)? Does the study area coincide or is part of the costumary territory of such peoples?

The Borana customary leadership has adhered to the World Alliance of Mobile Indigenous Peoples and do consider themselves as an indigenous people.

The others did not yet take any formal position

<u>1.2.6 Do the communities consider themselves a minority? If yes, on the basis of what, e.g. religion, ethnicity?</u>

The Gabra Migo tend to consider themselves a minority among the Borana, being incorporated into a larger group perceived as imposing its own customary rules.

The Garri and Degodia also tend to represent themselves as a minority that has historically suffered the Borana hegemony. Since 1994 these two groups have obtained their own districts (annexed to another Regional State, Somali) by cutting it out of the Borana customary territory and displacing the local Borana community.

Historical evidence shows that they have encroached into the Borana territory through alliance with dominant groups since the colonial time.

1.2.7 Are the communities permanently settled? If they are mobile, do they have a costumary transhumance territory? If yes, does the study area coincide or is it part of such a costumary territory?

Mobility has progressively been reduced by strengthening the Peasant Association structure. The Peasant Association is the lowest administrative unit. Peasant Associations tend to overlap with the customary grazing areas served by a permanent water points, but the customary arrangement was much more flexible in term of residence.

The pastoral system is very complex, with division of herds into dry and lactating herds, and into different stock types. While the villages tend to move occasionally, and often within a short range, most herds are highly mobile, requiring access to different ecological zones in the different seasons.

Due to erratic rainfall, long range and more permanent movement of villages and herds are also necessary, but restrictions are often imposed by the recipient communities due to sense of local ownership developed with the Peasant Associations agricultural and inappropriate water development.

The study area is much smaller than the customary territory, having the Borana lost access to key dry and wet season pastures and permanent water points, due to the administrative restructuring occurred in violation or basic human rights.

1.3 Governance Capacity³

1.3.1 (O) What is the Voice and accountability of citizens in the country

The World Bank indicator is less than -1.09, hence Ethiopia fits into the bottom quintile in the statistics referred to African countries (Source: World Bank 2006).

It is therefore very low, or **-2**

<u>1.3.2 (O)</u> What is the *Political stability and absence of violence* of citizens in the country

The World Bank indicator is less than -0.91, hence Ethiopia fits into the bottom quintile in the statistics referred to African countries (Source: World Bank 2006).

It is therefore very low, or **-2**

³ You can use file 2005kkzcharts.xls from the World Bank database. The file is in the 'files' section of the project's website

1.3.3 (O) What is the Government effectiveness in the country

The World Bank indicator is less than - 0. 87, hence Ethiopia fits into the bottom quintile in the statistics referred to African countries (Source: World Bank 2006).

It is therefore very low, or **-2**

1.3.4 (O) What is the Regulatory quality for citizens in the country

The World Bank indicator is less than -0.83, hence Ethiopia fits into the bottom quintile in the statistics referred to African countries (Source: World Bank 2006).

It is therefore very low, or **-2**

1.3.5 (O) What is the Rule of law in the country

The World Bank indicator is less than - 0.95, hence Ethiopia fits into the bottom quintile in the statistics referred to African countries (Source: World Bank 2006).

It is therefore very low, or **-2**

1.3.6 (O) What is the Control of corruption in the country

The World Bank indicator is between -0.87 to -0.52, hence Ethiopia fits into the second quintile in the statistics referred to African countries (Source: World Bank 2006).

It is therefore low, or **-1**

1.4 Regulatory Capacity

<u>1.4.1 (C)</u> Which binding and non-binding multilateral agreements influence nature policy either positively or negatively

CBD: Positive influence on the Environmental Policy of Ethiopia

Several UN Human Rights convention and declarations have positively influenced the drafting of the Constitution of Federal Democratic Republic of Ethiopia in relation to community rights and environmental rights. These rights are reflected in several policy documents, but not into provisions of laws, nor into practice.

The declarations and conventions specific to indigenous and tribal peoples would be of crucial relevance in Ethiopia, but they are not ratified nor transferred into the principles of the FDRE Constitution.

<u>1.4.2 (C)</u> What is the key legislation used to manage biodiversity at the national level

There is still a gap in specific legislation on biodiversity. After the introduction of federalism several conflicts of competence between federal and regional institution and in the legislation process developed.

There is currently a process of updating environmental legislation. A proclamation on pollution has already been approved (Proclamation No. 300/2002), and other, including some with provisions for communities and conservation, are under discussion. The older Proclamation to Provide for the Conservation, Development and Utilization of Forests (No. 94/1994) is inadequate to accommodate new positive experience in the field of collaborative forest management. The Participatory Forest Management Working Group has provided Recommendations and Comments concerning the new Draft Forest Policy, stressing the contradiction between the introduction of the document and the actual provisions, lacking any specific reference to participatory forest management (2001).

The recent "Access to Genetic Resources and Community Knoweldge, and Community Rights Proclamation" (n. 482/2006), and the "Environmental Impact Assessment Proclamation" (n. 299/2002) can potentially be key instruments for Community Conserved Areas, but most regional States still haven't produced their Regional State version.

<u>1.4.3 (C)</u> Identify the most important non-environmental legislation that impacts biodiversity

The most relevant non-environmental sector impacting biodiversity is land tenure and land use issues, especially concerning pastoral areas. Recognition of collective land rights would provide an instrument to check privatized unsustainable land use and investments. This is a crucial time having the government accepted to 'liberalize' land-use, by granting land holding certificates to individuals (not communities...).

The Statement on Pastoral Development Policy delivered by the Ministry of Federal Affairs in 2002 provides for promotion of 'voluntary sedentarization' along the banks of major rivers, change from mobile to sedentary life, transforming pastoral societies to agro-pastoral communities.

The old FDRE Rural Land Administration Proclamation No. 89/97 contains no much in relation to communal land holding, but it provides an opening for legislation at Regional level. The Oromia Rural Land Use and Administration Proclamation No. 56/2002 contains some provision on communal landholding.

The new FDRE Rural Land Administration and Use Proclamation N0. 456/2005 reverses al previous openings, explicitly encouraging private investors in pastoral areas where communal land tenure exists, and providing for full capacity by the government to change communal rural land holding into private holdings without any mechanism of checking.

<u>1.4.4 (O)</u> What is the level of conformity and correspondence within the identified environmental legislation

Being environmental legislation lacking or being inadequate in terms of community rights, the issue is rather what positive result was achieved despite the negative legal environment.

The best achievement have been obtained in Collaborative Forest Management thanks to the networking activity of the Participatory Forest Management Working Group.

Agreements were achieved especially through negotiations with various governmental institutions at Regional level, particularly Oromia.

<u>1.4.5 (O)</u> What is the level of conformity and correspondence between environmental legislation and other relevant legislation

The *Environmental Policy* and *The Conservation Strategy of Ethiopia* (EPA 1997) where jointly prepared by the Environmental Protection Authority and the Ministry of Economic Development. The policy seek full integration of development and environmental management, also providing for land rights, customary tenure systems, indigenous knowledge, customary institutions and independent Environmental Impact Assessments that incorporate the social and cultural impacts.

This policy, however, is hardly transferred into concrete or usable legislation, and especially the most recent legislation on land tenure tends to create conditions for unchecked investment and privatization of common tenure.

1.4.9 What mechanisms exist within national legislation or action plans to support collaborative management, and how well are they implemented?

As mentioned above, there is no explicit provision for collaborative management in Ethiopian legislation, but agreement could be signed with Regional State authorities in the field of collaborative forest management, since the legislation does not exclude this possibility.

Particularly, the Environmental Policy of Ethiopia contains several provisions for the empowerment of local communities, perfectly in line with the requirements of collaborative management. However the policy has not yet resulted in the required legislation and institutional setting.

1.4.10 Is the legal and policy framework for Protected Areas adapted to the recognition of Community Conserved Areas (CCAs) and/or indigenous people's territories and resource use rights?

The *Environmental Policy* and *The Conservation Strategy of Ethiopia* (EPA 1997) where finalized before the international recognition of CCAs. Although they do not mention CCAs, there are enough provisions about community empowerment, customary land rights, indigenous knowledge, pastoralism, cultural and natural heritage, customary institutions, sustainable natural resources managements and independent Environmental Impact Assessments that incorporate the social and cultural impacts to fully accommodate the recognition of the Ethiopian CCAs.

The legal framework is instead inadequate.

1.4.11 If yes, are traditional institutions recognized or new legally established bodies need to be created to managed CCAs?

Potentially traditional institutions can be recognized according to the Environmental Policy, but no legal framework is available for this step. Customary institutions are rather informally used by politicians on opportunistic basis.

In theory new legally established bodies would be as problematic as the recognition of traditional institutions, since the real issue is recognition of the collective tenure rights on land and water, and the capacity of the indigenous communities to decide about their own development.

<u>1.4.12</u> Following the approval of the CBD Programme of Work on Protected Areas, have there been any legal/policy developments relevant to CCAs? If so explain

Not yet.

1.5 General Social Capacity

<u>1.5.1 (C)</u> What is the general level of trust in the region between stakeholders and institutions (vertical)

The general level of trust in the region between stakeholders and institutions (vertical) is **very low: -2**

<u>1.5.2 (C)</u> What is the level of trust between stakeholders within social networks in the region (horizontal)

In civil society: **Medium**. Several NGOs operate in the area which have relevant degree of cross-communication (though not yet institutionalized) and cross-feeding, as well as a practice of collaborating on certain programs on specific demands of donors. **Rating: 0**

Between civil society and governmental agencies: **Very low**. There are no systematic mechanisms to coordinate initiatives and activities between civil society and governmental agencies (the latter benefit of relevant direct funding by the World Bank and other int. agencies and governments) .Governmental officers generally ignore workshops and initiative by the civil society sector. There are also initiates to induce all foreigner NGO workers to leave the country. **Rating: -2**

At national level there are a number of donors engaged in advocacy and policy formulation, particularly Norwegian People Aid, USAID, PCI. In addition, there is an important program by the EU in the field of Good Governance and Civil Society. **Rate:** +1

Overall rating: -1

<u>1.5.3 (C)</u> Do local communities perceive the benefits of biodiversity conservation (livelihoods, cultural, spiritual etc)? Do they perceive the costs of conservation activities? Please describe

Local communities very clearly perceive the benefits of biodiversity conservation as long as appropriate explanations (an operation of 'cultural translation' is required). During the action-research workshop held in Yaaballo the community has anyway requested more technical advice and training concerning biodiversity in a strict sense. This is a new cultural concept for which no translation is available in local language and for which scientific knowledge based in the global setting is considered necessary.

In a CCAs approach the cost of conservation is not considered high, since it basically implies maintenance of internal sustainable practices. Any change or loss which may be necessary for the sake of biodiversity *per se* is evaluated on the background of the advantage given by the possibility of maintaining control over their resources and their sustainable land use, in a context where globalization, inappropriate development initiatives and investors are rapidly dispossessing them and destroying their natural and cultural resources and cultural heritage.

<u>1.5.4 (C)</u> Are there local/traditional/community-based forms of natural resource governance present in the area? If yes, please describe them. How long have they been in place?

There are very strong customary settings of natural resource governance, a full range of customary institutions, customary leaders, customary laws and procedures developed in strict association with the natural resources for pastoral livelihoods. (See annex 2) (Bassi 2005).

The customary governance is known as *gadaa*, a complex system of generational classes producing a well trained leadership through a long ceremonial and political training process. There are also customary managers of specific natural/cultural resources, especially the traditional wells. This governance has been in place for several centuries.

See annexes 1 (Bassi and Boku Tache) and 2 (Yaaballo Statement on the Borana Conserved Landscape) for further details.

1.5.5 How well do local governance structures comply with indicators of good governance (participation, transparency, accountability?)

Participation, transparency and accountability are the constitutive characteristics of *gadaa* governance and of the Borana customary procedures in general. However, the internal mechanism only works within the Borana community, and, particularly the rural community.

1.5.6 Are current governance settings considered legitimate at the local level?

Customary governance is considered legitimate by the Borana.

It is also considered legitimate by other pastoral groups living among the Borana, as the Gabra Migo, or other pastoralists occasionally interacting with the Borana, such as Guji-Oromo or the Somali Mareexaan, especially in relation to pastoral use of natural resources.

However, this legitimacy only operates at the informal level and with reference to the rural setting. The relevance and influence of customary institutions on town matters, where different ethnic groups mainly live, and on governmental politics is considered irrelevant, even when town-based (or governmental) decisions affects use of, access of and management of natural resources in the countryside. Over the last 15 years major inter-ethnic conflicts occurred as a consequence of this type of town-drawn decisions.

1.5.7 Are they considered legitimated by the government?

Although the customary institutions cannot be considered legitimate by the government being no legally recognized, more and more programs and policy documents explicitly refer to them and to the need to 'consult', 'involve', 'integrate' them in the administrative practice and development programs.

Regular (although informal and personal) interaction is taking place in the political arena.

In absence of institutionalized mechanism and procedures of interaction this acknowledgment results in operating at the mere rhetoric level or for opportunistic aims.

2.1 Natural Resource Management

<u>2.1.1 (C)</u> Are there specific plans regulating the use and management of natural resources for the area or parts of the area under study?

There is an ongoing work by both governmental agencies and NGOs to develop GIS land use plans at landscape level. This plans are oriented towards a 'food security' approach, and as far do not include any attention for environmental issues besides the formally protected forests.

There are also specific management plans developed by SOS Sahel, the community and the relevant governmental organizations concerning the protected forests under collaborative management.

There are also master plans regulating town development. Since the town authorities are now easily allocating land certificate for house building in town, illegal logging is likely to grow exponentially, exactly at the time SOS Sahel has phased out its collaborative forest project.

<u>2.1.2 (C)</u> If not a specific "plan" are there customary community-based rules and regulations (e.g. written or oral management plans and rules for extraction/use) to manage natural resources?

There are a large number of specific customary rules and regulations concerning access to and management of underground water, rivers, ponds, rules for sustainable use of grazing area, protection of well sites, of ceremonial grounds, of natural monument (crater lakes), religious and ethical values protecting all birds and snakes snake, and specific grass and trees species (see annexes 1 and 2 for more details)

The overall sustainable management of pastoral resources (forests, grazing areas and water) is the result of a combination of the available regulations, principles and practice, in relation to the available technology. The interdependence of the different elements has to be considered when analyzing the potential impact of technological innovation.

2.1.3 (C) What is the time frame of management

The forest management plans are based on a 3 to 5 years evaluation and review cycle.

The indigenous time frame is 8 years, a gada period, the time between the passages of responsibility from one generational class to the next, or between two Gumi Gayoo, the General Assembly of the Borana.

2.1.4 (C) To what extent are ecosystems managed with an ecosystem approach or as separate natural resources?

The customary resource management system is by definition based on an ecosystem approach, since individual pastoral families need differential access to all resources at different time/stages.

The collaborative forest management was initially based on conserving the forests alone. Through systematic interaction with the customary leaders a new approach has developed by which the community applies there customary laws to self-protected trees outsides the formally protected forests. Cases have been registered of the local community having stopped the lorry of illegal loggers and having called the authorities. However, doubts have been raised on the reliability of the governmental authorities in supporting the community efforts after SOS Sahel phases out this year (2007).

In several cases the community has extinguished fires in the forests by applying their customary law.

<u>2.1.5 (C)</u> What are main scientific, social, economic and conservation objectives of the MP and/or the customary regulations?

The objectives of MP of the State protected forests are:

- sustainable environment and sustainable livelihoods;
- preserve livelihood opportunity (income generation by selling forest products, fire wood, timber for domestic construction, honey production);
- provide other ritual, cultural and health benefits, including, ritual and medicinal plants, ceremonial grounds.

So far there are no scientific objectives, since the management plan was developed with the community.

The main objective of the customary regulations of the entire landscape (where no management plans exist so far) is to assure sustainable environmental management and equitable access to natural resources to the different families. Since the entire culture and life-style have developed in relation to the territory, the objective is also conserving the heritage sites and ritual grounds.

2.1.5a (C) If all or part of the area is a protected area or a CCA, which IUCN management category does it fit best? (add reference)

The Borana Conserved landscape fits with the IUCN management category V as re-defined in recent work (Phillips, 2002; Borrini-Feyerabend et al . 2004:13-16 and 24-5; Kothari 2006: 4-5). For details please see Annex 2 (Bassi and Boku 2005).

Within the landscape, some spots have received special protection either in terms of customary norms or State legislation. Accordingly they fit with more restrictive IUCN categories:

The traditional wells, particularly the *tulaa*, are human made heritage spots which by customary norms are left without human settlement and only seasonally accessed with livestock. They fit IUCN category III.

The 3 volcanic places (*Booqee sadeen*) with crater lakes and traditional wells, providing different salt varieties and high quality water for human and cattle consumption. These can be classified as IUCN Category III.

The ritual grounds, scattered in the territory and often demarcated by a *Ficus Sycomoro* tree, should, according to tradition, be maintained in a purely natural state, fitting IUCN Category Ib.

The three largest forests of *Juniper Procera,* previously protected in the frame of the wider system of pastoral resource management (only occasionally grazed), then legally protected and managed by the State and now managed areas under collaborative management arrangement, fits IUCN Category IV.

Yaaballo Wildlife Sanctuary formally protected by the State as a representative sample of the Acacia-Commiphora open woodlands and bushlands and the associated fauna, fits IUCN Category IV. 2.1.6 (C) Of the ecosystem services and biodiversity used in the area, which are prioritised by the Management Plan

The management plan of the forests under collaborative management prioritizes the following ecosystem services:

1.2.1. Timber

1.1.2. Livestock

1.2.3. Wood fuel

3.2. Spiritual and religious value

2.1.7 (O) Is licensing for use allowed

YES.

The amount of extraction of fuel wood, timber for domestic construction are decided by the Forest Management Group (jaarsi maddaa ka finna baddaa). The governmental authorities have approved and signed the plan and the *gada* (customary) leaders have approved the new system.

The forest management groups-*jaarsi maddaa ka finna baddaa* – are established at *madda* (peasant association – the lower rural administrative unit) level. They patrol the area. They have the right impose sanctions according to customary procedures (see next box, 2.1.8). The forest management members have an obligation to attend, as in the customary system.

On the whole this is a new function attached to the customary system, but there are also regular meetings in town attended by the relevant governmental officers, thus interlinking the two systems.

2.1.8 (C) How is the use of the natural resources monitored over time

<u>At madda (Peasant association) level:</u> the Forest Management Group meet every 2 weeks, or monthly, according to season. They discuss the problem they encountered in relation to forest management. If they monitor a problem they can make a corrective decision. They can for instance mobilize community members for re-planting (seedlings). The community members have nursery sites and are not paid. They are planting various species, including the juniper. They get technical support from the Natural Resource Department.

<u>At district level</u>: Participatory Forest Management Group (PFMWG) meets monthly. Stakeholders include: community elders (men and women, members of Pas), Governmental officers (PDO – Pastoral Development Office, Cooperative promotion office, District administration, District Police, Public prosecutors, and, only in in Liban District, the Army, because the soldiersuse fuel-wood). They receive reports from different *maddaa*, and treat cases beyond *maddaa* capacity. If an accused person is found guilty he is judged and punished according to customary procedures and laws, but if he rejects the elders' decision, he will be addressed to the formal legal system.

The overall evaluation will be made according to the Participatory Forest Resource Assessment (PFRA) by community members with professionals. SOS Sahel will implement it the first time and will facilitate the process. Later PFRAs will be repeated by the government every 5 years.

In the sign agreement it is stated that the if forest will deteriorate beyond the present state the collaborative agreement will be canceled.

<u>2.1.9 (C)</u> What kind of support is available for the management of the area (legal, technical, financial political) and from whom?

The collaborative management agreement has been signed by the governmental agency in charge of managing the Protected Forest and it is legally binding.

Technical Support is available at Regional level (Oromia) by the PFM (Participatory Forest Management) Unit. The establishment of this office is the result of advocacy made by the network of NGOs. Its mandate is to facilitate the PFM process and taking a coordination role with other Regional States.

In December 2006 there was a National PFM working group meeting in Jimma, coordinated by Oromia Region.

In March 19-23, 2007, the was an International Workshop on PFM Biodiversity and Livelihoods, organized by SOS Sahel, Farm Africa, GTZ, Ethiopian Coffee forest Forum, the Oromia Agricultural and Rural Development Office and others. The President of Federation made an opening speech. (Proceedings not yet published).

3.1 Governance Processes: Regulatory

<u>3.1.1 (C)</u> How many institutional levels are involved in the regulation of biodiversity conservation in the studied area?

- 1 Supra-national
- 2 Federal State
- 3 Regional State
- 4 Zonal
- 5 District
- 6 Local (PA)

In addition there is one parallel customary dimension of governance relevant from level 4 downwards.

<u>3.1.5. (O) What is the awareness of government regulations among stakeholders within the area?</u>

Among indigenous people/pastoralists (rural): -2 Among small farmers: -1 Among town dwellers: 0 Among traders and merchants: 0 Among governmental officials: +1 In the NGOs environment: +1

Overall rating: -1

3.1.6 How well are different institutional levels (eg community-level and regional/national) integrated?

The integration between the Federal State and Regional States (level 2 and 3) is particularly problematic in Ethiopia. **Rating:** -2

Integration of levels 3, 4, 5 and 6 is much better. **Rating:** +1

In relation to the pastoral areas of Oromia, the OPADC (Oromia Pastoral Areas Development Commission) is governmental organization linking different administrative levels in relation to pastoral areas. This excellent opportunity in term of institutional level is undermined by the fact that it is basically implementing the federal policy for pastoral development. Although it formally acknowledges the customary sector, this is a top down policy with potentially very negative impact in terms of environmental management. Thus the positive rating here given refers to the institutional function and potential, while actual outcomes might be the reverse: **Rating: +1.**

The customary institutions are only informally consulted and linked to the formal structure, with the exception of the SOS Sahel project in collaborative forest management. **Rating: -1**

Overall rating: -1

3.1.7 What is the degree of awareness in government institutions of existing local rules for natural resource management?

All actors are perfectly aware of the existence of an indigenous governance system, being these institutions mentioned in most policy document. However, governmental officials may not be aware of the degree of complexity of the customary system of resource management and of the customary laws, and particularly they are not used to consider such rules as particularly relevant to natural resources management. They tend to consider it a generic system concerning the rural population.

More and more meetings have been organized by advocates and NGOs to promote the diffusion of the pastoralists' voice, to the point that it is unlikely that governmental officials are not aware. However, even when perfectly aware, governmental officials at all levels, including the lower PA level (level 6), deliberately and systematically ignores the customary regulations in implementing development planning and initiatives.

Rating: -1

3.1.8 How has the governance setting (government vs traditional governance structures, etc) evolved over time?

During the imperial time (1900 to 1974) intermediate leaders (others than the customary leaders) were selected who, being indigenous, were informally respecting customary institutions (indirect rule).

After the socialist revolution (1974) a highly centralized system was established with the creation of the Peasant Association structure (the lower administrative level- level 6), administrated by Party' members. Despite the institutional arrangement, many Borana (indigenous) individuals were incorporated within the administration and continued to fully respect the customary institutions, particularly in relation to rural issues, including pastoral issues and management of natural resources.

After the overturn of the socialist regime (1991) a constitutional federal democracy was introduced, but the political practice has been hampering the promise and a strong mistrust developed between the government and the indigenous Borana community. International aid gave the government the possibility to unilaterally implement development plans in total disregard of customary management of natural resources and, in addition, of basic human rights (with the exception of the Participatory Forest Management established by an NGO with EU funding).

<u>3.1.9</u> Do government rules and regulations marginalize or support traditional/historical governance structures?

Although policy statements and documents do acknowledge the relevance of customary institutions, actual legislation and practice marginalize the customary governance structure, by simultaneously trying to co-opt individual customary leaders.

3.2 Processes: Economic and Financial

<u>3.2.1 (C)</u> What market tools and incentives are in place to support the management of ecosystems or components within them

No market tools and incentives have been developed to support the management of ecosytems in the study area

3.2.2 (C) Who controls these markets tools and incentives?

3.2.3 (C) What is the awareness of current mechanisms among stakeholders

3.3 Governance Processes: Societal

<u>3.3.1 (C)</u> How many different stakeholder groups (e.g. Organisations) are involved in the management of ecosystems and biodiversity?

In relation to forests under collaborative management:

- Forest Management Groups (local community)
- Various governmental organizations
- SoS Sahel, an Ethiopian NGO
- Small-holding farmers
- Town-based merchants

In relation to the broader landscape

- Indigenous pastoralists
- Various governmental organizations
- Gayo Pastoral Development Initiative, an indigenous NGO
- Small-holding farmers
- Town based businessmen and external investors

<u>3.3.2 (C)</u> Is local knowledge and experience incorporated into management planning?

YES, concerning the Forest under collaborative management for which plans exist. Local knowledge has been investigated at the very beginning of the project and has informed the governance structure later designed. In addition, the management plans have the explicit objective to conserve and control extraction of traditional medicinal and ritual plants and woods, to preserve tree species of high symbolic value and to protect the ritual grounds inside the forest. 3.3.3 (C) Is there significant collaboration among local stakeholders?

<u>In relation to forests under participatory management</u>: Yes, at least now that SOS Sahel is still following up, but less is expected with the progressive phasing out of SOS Sahel phasing out. **Rating:** +1

In relation to the broader landscape:

The collaboration is relatively good between the customary sector and some Ethiopian and indigenous NGOs (SOS Sahel, Gayo Pastoral Development Initiative, Action for Development), but extremely bad between the indigenous community and the government, hence the overall rating is an average. **Rating: -1**

Overall rating: 0

<u>3.3.4 (C)</u> Do informal policy networks exist of key persons representing institutions and stakeholders across organisational levels?

There is one effective informal network in the field of Participatory Forest Management: Participatory Forest Management Working Group. **Rating:** +1 <u>3.3.5 (C)</u> Is there a clear leadership role of certain stakeholders or agencies in the management process?

The only clear leadership is the one of the customary sector.

<u>3.3.6. (C) Are there stakeholder groups excluded from influencing management decisions?</u>

The scarce capacity of the community and the customary leaders to influence has been studied by a leading international scholars (Lister 2004). **Rating: -2**.

The analysis of recent legislation and policy made for this GEMCOMBIO actionresearch show some impact of advocacy activity by international and national actors on some policy documents, but a strong divergence with decision making in sectors that really count, especially in actual legislation. **Rating: -1**

Town-based businessmen and investors (they are technically stakeholders) are instead successful in their lobbying activity, and have obtained ad hoc legislation paving the way for individual appropriation of communal land and unchecked investment. The positive rating here given will result in negative environmental impact. **Rating:** +1.

Overall rating: -1

<u>3.3.7 (C) How is collaboration/conflict with other stakeholders (migrants, companies...) managed?</u>

The relation among stakeholder is managed by the government in top-down modality. **Rating: -2**

4.1 Impacts: Economic & Financial

<u>4.1.1 (C)</u> Do Stakeholders realise a new value from the ecosystem goods and services as a result of the governance processes? If yes how are these benefits valued?

In relation to forests under participatory management:

Yes, they do in relation to the following ecosystem services:

1.2.1. Timber; 1.2.3. Wood fuel; 3.2. Spiritual and religious value; 3.3. Knoweldge systems; 3.7. Social relations; 3.9. Cultural heritage values

In relation to the broader landscape:

Here the perception of a weakening of values as a result of abuse of customary governance prevails. The ecosystem services for which the indigenous community is particularly worried are:

1.1.2. Livestock; 3.1. Cultural diversity; 3.2. Spiritual and religious value; 3.3. Knoweldge systems; 3.7. Social relations; 3.9. Cultural heritage values

These benefits are valued in terms of commodities (being livestock still the main income source and means of survival) and also in terms of identity, religious and social values.

<u>4.1.2 (C)</u> Do Stakeholders realise a non-monetary new value from the ecosystem goods and services as a result of new biodiversity governance?

As from answer 4.1.1..

Several of the ecosystem services gained through collaborative forest management, or desired by the broader landscape approach are not goods in a strict sense. They are considered non-monetary values of primary relevance.

<u>4.1.3 (C)</u> Are new market opportunities exploited as a result of the management decisions?

The only tangible market opportunities developed as e result of the management decision is the establishment of a small break-making enterprise as an alternative to the traditional house building in town (made of termite-resistant juniper wood covered by mud). Unfortunately the cost for alternative town building techniques is still too high compared to cost of wood from illegal logging that is again taking place as a result of two factors:

- Phase out of SOS Sahel and scarce motivation by governmental agencies
- Town policy of allocation of land for house construction. Unfortunately, according to this policy, land can only be obtained if the applicant (a town resident individual) has the possibility to build. Ownership is only recognized on the construction rather than land. Thus individuals are under a strong legal pressure to start building the house on the allocated plots, to assure their individual land title in towns, and being able to keep it or later sell the property so acquired to external actors. Under these conditions the demand for the cheapest building technique is very high.

<u>4.1.4 (C)</u> Are market opportunities missed as a result of governance processes?

Market opportunities in relation to biodiversity management are not really developed, nor they are missed as a result of governance processes.

4.1.4a (C) Are there negative impacts of market-based policies?

The enclosure of market oriented ranches, the individualization of land for smallholding farming, the ongoing process of individualization of land and the current policy of investment have either already seriously affected or expected to seriously affect the management of natural resources, unless the Borana Protected Landscape gets legal recognition.

See also question 4.1.3 about how the policy of allocation of urban land title (a result of the international lobbying for recognition of private property of land in a market economy) is seriously affecting the State protected forests currently under collaborative management.

<u>4.1.5 (C)</u> Who bears the cost of the management of natural resources for biodiversity

In relation to forests under participatory management:

Mainly the urban merchants, having reduced the chance to engage in illegal logging. The local community and the poorer among them were previously engaged in poorly paid trees cutting, but can now benefit of the formal management of the tree resources. In terms of failed possibility of expansion, also the small holder cultivators have lost some opportunities (they are mainly c external immigrants/refugees)

In relation to the broader landscape:

Once the management plans and procedures will be established, the cost will mainly consist in failed business opportunities by urban businessmen and external investors (national and international), as well as a reduced possibility to engage in agriculture by both members of the indigenous community and immigrants/refugees.

<u>4.1.6 (C)</u> Who benefits from the management of natural resources for biodiversity

<u>In relation to forests under participatory management:</u> The local community living in the area of the forest enjoys most of the benefits.

In relation to the broader landscape:

The indigenous pastoral community (especially the generations to come) are expected to enjoy the benefits once effective management will be established.

<u>4.1.7 (C)</u> Have stakeholders changed through time their perception of values from the ecosystem and biodiversity? If yes, how?

The SOS Sahel project has raised awareness about biodiversity. In the indigenous language the term does not exist, but the issue is now systematically raised by the pastoralist themselves in the national and international advocacy gatherings that took place in the area. The elders are systematically trying themselves to apply their existing regulation concerning selective conservation of trees in the entire landscape. They have also deliberated for the protection of kudus and other herbivorous, as well as for a family of elephants seen for the first time in the region after 70 years. All these initiatives took place without any interventions by any external, governmental or NGO agent.

This awareness has now grown as an effect of the GENCOMBIO action research and participatory workshop, attended by three generations of *gadaa* customary leaders, one *qaalluu* and several other elders and community members, as by annexed Yaaballo Statement on the Borana Conserved Landscape.

4.2 Impacts: Social

<u>4.2.1 (C)</u> Has the governance setting in the study area changed significantly in the last 100 years or so? For instance, have customary governance structures been strengthened or undermined over time? Please describe

The governance of natural resources was centered on water rights: clans and individual invest in developing water resources (traditional wells, ponds) obtaining primary water rights. Other families/clans/individuals obtain access to water by merging with the right holders or by using a limited quota of access available for certain social categories, including non-borana herders and wildlife.

Access to grazing was limited by the limited availability of water, that was the main constraining factors. Direct property rights on land do not exists, but there were rules of exclusions and protection of certain areas for crisis. Their enforcement was assured by a structured formal leadership and by referring to customary law, the outcome pf the *gadaa* and *qaalluu* customary institutions.

The colonial governments (from about 100 years) have affected the system. In a first phase they have granted grazing rights to other encroaching mobile groups. During the socialist time agriculture was supported by policy. After the socialist time (from 1991) 'returnees' (many of whom were not originally from the area) have been settled into Borana territory and encouraged to cultivate. As a result of inter-ethic conflict the indigenous Borana have been entirely dislocated from large parts of their customary territory. After an administrative re-arranged they have permanently be deprived of key pastoral areas and water resources. Town immigration and agriculture continued to be encouraged, further affecting the pastoral system and the capacity of the indigenous community to self-sustain. Various international NGOs have supported the resettlement schemes and have later implemented both EU funded and World Bank funded projects whereby new motorized boreholes with large water output where provided in area where grazing was only seasonal. A nearly complete up-rooting of the rights system developed, by which town-based merchants could raise cattle and gain access to the limited grazing resources, seriously affecting the grazing grass composition and the availability of grass for rural families. Customary leaders and customary governance in general were incapable to have any influence on these State-

Customary leaders and customary governance in general were incapable to have any influence on these Stateinduced processes.

<u>4.2.2 (C)</u> How did such change negatively or positively affect the relationship between communities the government and other actors?

From 1991 onwards the level of trust with the government has sharply declined from +1 to -2.

NGOs have shown a variable degree of capacity to selectively implement international and governmental-driven programs, some selecting only projects with objectives in line with the expectation of the community, others simply seeking the possibility to keep them operational by a-critically accepting whatever opportunity was available. The level of trust with NGO is therefore **0**, but with a high internal variance.

Although a large number of indigenous middlemen are emerging in cattle trade, the market is still highly dominated by external actors with access to capital and means of transport, and livestock facilities are located in the highland. The overall relationship with businessman, traders and investors and the community is positively affected by the marginal but existing participation of some community members in this sector, but it is on the whole very negatively evaluated, with an average **-1**.

Overall rating: -1

4.3 Impacts: Ecological

4.3.1 (C) Has the delivery of ecosystem services identified in Section 1 changed as a result of the changes in governance processes?

Ecosystem service	Forests under	Broader
-	participatory management	landscape (50
	(last 8 years)	years)
1.1.2. Livestock	0	-2
1.1.1. Crops	-1	+2
1.2.1. Timber	0	+1
1.2.3. Wood fuel	0	+1
3.1. Cultural diversity	0	0 (the diversity of
		immigrants is
		here considered)
3.2. Spiritual and	+1	-2
religious value		
3.3. Knoweldge systems	+1	0
3.7. Social relations	+1	-1
3.9. Cultural heritage	+1	-1
values		

<u>4.3.2 (C)</u> Have the threats identified in Section 1.1.5 increased or decreased as a result of the changes in governance processes?

Threat	Forests under participatory management (last 8 years)	Broader landscape (50 years)
1.1.1.2. Small holding farming	0	- 2
1.3.3.2. Selective logging (in forests)	0	- 1
1.5. Invasive alien species	0	- 1
1.6. Change in native species dynamics	0	- 1
1.7. Fires (in forests)	+ 2	- 1 (it is here considered that controlled fire is positive in open bushlands, hence the fire ban lead to negative trend)

5 Change in the State of Biodiversity

<u>5.1.1 (C)</u> Based on the suite of impacts, what is the expected net impact on biodiversity of the current governance setting?

In the current governance setting we can aspect maintenance of current biodiversity in the forests under participatory management. **Rating: 0**

If not effective management of the broader landscape will be established after the declaration of intendment by the Borana indigenous community (Annex 1) it is expected a sharp decline of relevant biodiversity: Rating: -2

Overall rating: -1

6. Evaluation

<u>6.1.1 (C)</u> On the basis of your time related analysis, what characteristics of governance seem to positively correlate with conservation of biodiversity and equity?

Customary governance is the factor that has been conserving the environment so far. During the GEMCOMBIO Third Country Action-research and participatory workshop the community and the customary leaders were informed about the global concept of biodiversity and the need to conserve it and about the emerging concept of Community Conserved Area. Reflection and analysis over weaknesses and strengths of customary governance and analysis of the current problems in relation to external factors took place.

Customary governance, customary laws, customary leaders and institutions and indigenous resource managing systems, including collective and customary rights over water sources and land, were identified as the elements of governance that are positively correlated with conservation of biodiversity.

<u>6.1.2 (C)</u> On the basis of you time-related analysis, what enabling conditions seem to positively correlate with conservation of biodiversity and equity?

In the study area and in Ethiopia there is an operative network that has already obtained key institutional results in relation to Participatory forests. There are several organizations active in advocacy, including pastoral advocacy. There are also Federal level institutions (Environmental Protection Authority; Institute of Biodiversity Conservation) that have promoted the translation of principle contained in the CBD into environmental policies and that may allow the establishment of Community Conserved Areas.

<u>6.1.3 (C)</u> Can you identify some current internal and external threats to conservation of biodiversity and equity in the study area? Please describe

The appropriation by external actors (immigrants, investors...) of the natural resources customarily used and managed by the Borana indigenous people, and development policies that will result in breaking down of the system of internal allocation of land and water rights are the stronger threats to conservation of biodiversity and equity in the study area.

Good environmental policies and some legal proclamations formulated at federal level contrast with other federal development policies (such as pastoral policies) and land use laws, and they are not effectively transferred at National State level.

In a country where political accountability and national governance is rated so low by the World Bank, it seems that actual legislative and administrative decisions more and more tend to respond to the lobbying activities of national and international investors rather than the advocacy demands of local communities.

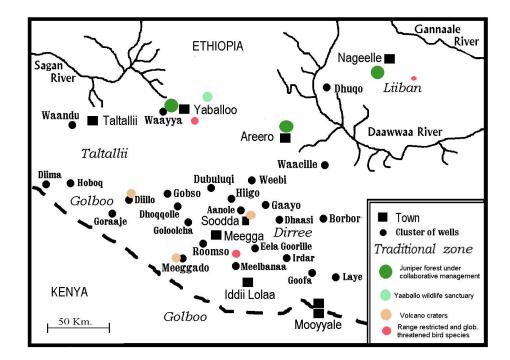
<u>6.1.4. (C)</u> What kind of policies and other forms of support can be envisaged to promote the conservation of biodiversity and equity in the study area?

In the Ethiopian context conservation of biodiversity and equity can be supported by actively building on the existing environmental policies, and by promoting the promulgation of coherent legislation at all levels.

The potential of the Community Conserved Area approach is outstanding, in consideration of the wide range of peoples, culture and customary governance setting found in the country. This requires ad hoc updating of policy and legislation, with special attention to the legal recognition of customary governance, institutions and laws, and specifically, of the customary and collective rights of the various communities on water, land, and other natural resources. At local level specific modalities and procedures need to be build in relation to the specific context. These activities can immediately be started in the current legislative and policy environment.

The GEMCOMBIO action research on the Borana Conserved Landscape identified the following follow-up main activities: Workshop at National Level on Community Conserved Areas; Action Research to institutionalize the relation between the customary leadership/governance/laws and the modern sector; Capacity building initiatives for the sake of biodiversity conservation and sustainable use of land resources; Advocacy activities to influence legislation at federal and Regional State level for the recognition of customary and collective rights, for the recognition of customary governance in relation to management of natural resources, and for assuring full and independent participation in the Environmental Impact Assessment of all private and public initiatives potentially affecting the cultural and natural landscape.

D. Governance Type Assessment and overall conclusions



THE BORANA CONSERVED LANDSCAPE

The Borana Conserved Landscape is located in Southern Ethiopia, along the boundery with Kenya. It corresponds to the remaining part of the customary territory of the Borana-Oromo after they were dislocated from an area now assigned to the Somali Region of Ethiopia from 1992 onwards. It is about 45,620 Km² B located in part of Borana Zone and part of Guji Zone of Oromia Administrative Regional State. It is a coherent management unit used for pastoralism by a single mobile indigenous people, the Borana, incorporating other pastoral groups. It includes diverse habitats at different elevations, with different rainfall and vegetation types, ranging from dry grasslands to evergreen forests. It hosts valuable biodiversity, including 4 restricted-range species of birds.

The Borana Conserved Landscape is an outstanding example of territory managed in a sustainable and eco-compatible way through customary institutions and according to customary laws. Borana customary governance is based on *gadaa*, a generational class system. The prevalent governance type of the Borana conserved landscape is therefore Community governance. In addition, since the 70s there are Government-based protected areas for a total 2-3% of the Borana Conserved Landscape, the three *Juniper procera* national forests of and the Yaaballo Wildlife Sanctuary (a representative sample of the Acacia-Commiphora open woodlands and bushlands and the associated fauna). From 1999 SOS Sahel has introduced Shared

governance, based on binding written agreements between the governmental agencies and the community, in the three national forests (1-2% of the Borana Conserved Landscape). The collaborative management of the forest was achieved by involving the customary leaders of the Borana and in accordance to the customary laws.

Gadaa (customary) governance acknowledged by all actors, but not formally or legally recognized by the State. It is based on a complex configuration of individual and collective rights to water and pasture, and on rules of access agreed by customary laws and *ad hoc* decisions taken in public customary This rules and modalities were the facto assemblies and meetings. recognized by the various actors, including the pastoral groups of various ethnic backgrounds and the governmental officials, though progressively eroded by the introduction of agriculture since the time of incorporation of the Borana into the Ethiopian empire (about 100 years ago). Cultivation and limitation of mobility were promoted during the socialist time (1974 - 1991). After the socialist period agriculture greatly expanded through resettlement of immigrated and 'returned' communities, and by allocation of land for agriculture to both Borana and non-Borana, unilaterally decided by governmental officials. Settlement of mobile communities, privatization of land under tribal management and promotion of investment are explicit objectives of pastoral policies and land legislation. International aid gave the government and some international NGOs the possibility to unilaterally implement development plans in total disregard of customary management of natural resources. These initiatives have produced negative environmental impacts and have seriously affected the customary system of water and grazing rights. Investors and wealthy commercial-oriented owners of stock have gained free access to natural resources, while poor pastoral families where forced to survive in deteriorated and over-exploited pastoral environments, increasingly caught into a subsistence crisis.

As a whole, customary governance has been weakened by externally-driven factors of change, with negative impacts on social relations, equity and biodiversity. The populations of the monitored restricted-range bird species have sharply declined over the last 15 years.

In order to stop and reverse this trend during a workshop held in Yaaballo in July 2007 the customary leaders of the Borana have explicitly announced the intention to conserve biodiversity along with normal pastoral sustainable livelihoods in the territory they inhabit. (see annex 1, Yaaballo Statement on the Borana Conserved Landscape). In Ethiopia conservation of biodiversity and equity can be supported by actively building on the existing environmental policies, and by promoting the promulgation of coherent legislation at all levels. The Community Conserved Area approach has a great potential, requiring ad hoc updating of policy and legislation, with special attention to the recognition of customary governance, institutions, laws, and specifically, of the customary and collective rights of the various communities on water, land, and other natural resources. At local level specific modalities and procedures need to be build in relation to the specific context.

The GEMCOMBIO action research on the Borana Conserved Landscape identified the following follow-up main activities:

- Workshop at National Level on Community Conserved Areas;
- Action Research to institutionalize the relation between the customary leadership/governance/laws and the modern sector;
- Capacity building initiatives for the sake of biodiversity conservation and sustainable use of land resources at local level;
- Advocacy activities to influence legislation at Federal and Regional State level for the recognition of customary and collective rights, for the recognition of customary governance in relation to management of natural resources, and for assuring full and independent participation in the Environmental Impact Assessment of all private and public initiatives potentially affecting the cultural and natural landscape.

E. About the case study methodology

The focal point of the Third Country studies will describe their methodology in a separate report due at the time of the international Third Country workshop

F. Photos

Please add in separate jpg files a number of numbered pictures of the case study area. Mention here the caption for each numbered picture and the author of the picture for credit purposes in the format

G. References

Bassi, M. 2005. *Decisions in the Shade. Political and Juridical Processes among the Oromo-Borana*. Trenton: Red Sea Press.

Boku Tache and B. Irwin. 2003. "Traditional Institutions, multiple stakeholders and modern perspectives in common property. Accompanying change within Borana pastoral system", *Securing the commons*, Working paper No. 4, IIED, SOS Sahel.

Borghesio and Giannetti. 2005. "Habitat degradation threatens the survival of the Ethiopian bush crow *Zavattariornis stresemanni*", *Oryx*, 39 (1), 44-49.

Borghesio, L. et al. 2004. "A reassessment of the conservation status of Prince Ruspoli's Turaco *Tauraco ruspolii*", *Bull ABC*, vol. 11 (2), pp. 105 – 111.

EPA, 1997. *Environmental Policy*. The Federal Democratic Republic of Ethiopia, Environmental Protection Authority, Addis Ababa.

EPA, 1997b. *The Conservation Strategy of Ethiopia*, Voll. 1-5. The Federal Democratic Republic of Ethiopia, Environmental Protection Authority, Addis Ababa.

Kothari. A. 2007. "Community Conserved Areas: towards ecological and livelihood security", parks, 16 (1), 3-13.

http://www.iucn.org/themes/wcpa/pubs/pdfs/PARKS/parks_16_1_forweb.pdf

Lister, S. 2004. "The Processes and Dynamics of Pastoralists Representation in Ethiopia". Working Paper N. 220, *IDS*.

MoFA. 2002. *Statement on Pastoral Development Policy*. The Federal Democratic Republic of Ethiopia, Ministry of Federal Affairs, Addis Ababa.

Participatory Forest Management Working Group. 2001. "Review of Draft Forest Policy. Recommendations and Comments", Ethiopia.

Philips, A. 2002. *Management Guidelines for IUCN Category V Protected Areas: Protected Landscapes/Seascapes*. Best Practice Protected Areas Guidelines Series. Gland and Cambridge: IUCN.

World Bank. 2006. Africa Development Indicators 2006.

H. Annexes Annex 1. Yaaballo Statement on the Borana Conserved Landscape

We, the customary leaders, elders and community representatives of the Borana Oromo in Ethiopia gathered in Yaaballo for the Workshop on the Borana Conserved Landscape;

AWARE that the IUCN World Park Congress held in Durban, South Africa, in 2003 has recognized the capacity of mobile indigenous communities to conserve biodiversity based on their customary laws, governance, common tenure and practices, in full compatibility with their pastoral livelihoods; that it has recommended to recognize Community Conserved Areas as a new governance type within the IUCN protected areas management categories and to place conservation within the context of a broader landscape approach;

AWARE that articles 8(j) and 10 of the Convention on Biological Diversity promote the application of indigenous knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biological diversity, and encourage customary use of biological resources in accordance with traditional cultural practices;

AWARE that the VIIth Conference of the Parties of the Convention on Biological Diversity held in Kuala Lumpur in 2004 has fully acknowledged the value of areas conserved by indigenous and local communities and has invited the parties to the convention to support them by legal and/or policy, financial and community mechanisms;

AWARE that the Environmental Policy and the Conservation Strategy of Ethiopia (1997) recognize customary rights of access to and use of land and natural resources; ensure that development and management of environmental resources are undertaken based on the decision of the resource users and managers; recommend that traditional community institutions of resource management, constitutionally acceptable and preferred by the local people, shall be legally empowered to regulate the use and management of natural resources; promote the valorization of local indigenous knowledge; encourage communities to play a leading role in assessing and conserving places or items of heritage and suggests to manage them with a landscape approach, seeking to understand all the elements of the system and their interrelationship; provide for the development of the necessary legislation, training and financial support to empower local communities; ensure that environmental impacts of public and private sector development programmes and projects are assessed; introduces the precautionary principle in assessing potentially damaging impacts when taking decisions that affect pastoral areas; and recommend that the procedures for environmental impact assessments provide for an independent and public component, including consideration for the social, socio-economic, political and cultural independent dimensions;

RECALLING that we, the Borana Oromo people have inhabited our territory and have been managing our natural resources since centuries;

RECALLING that we have been governing this area under the custodianship of our customary institutions, the *raabaa-gadaa*, the *laduu*, and our customary leaders, the *abbaa gadaa*, *qaalluu*, *lichoo (hayyuu)*, *qa,ee*, *jaarsa*, *jaallaba*, *abbaa dheedaa*, *abbaa eelaa*, *abbaa ollaa*;

RECALLING that we have been managing our resources according to our customary laws (*aadaa seera*), including *seera marraa-bisaanii* (the law of pasture and water), and to practice, beliefs and ethical principles governing the relation between humans and the creation of Waaqa (God), that have assured maintenance and transmission of natural resources from generation to generation;

RECALLING that the grazing zones, the three forest systems (from Nageelle to Dooloo, from Yaaballoo to Areeroo and from Meegaa to Mooyalee), the rivers, the springs, the *adaadii* water wells, the *tulaa* water wells (La'ee, Goofa, Meelbana, Goorile, Gaayo, Iigo, Dubluqi, Weebii and Waacille), the ponds, the three *booqe* crater lakes with their mineral resources (Sooda, Magadoo and Dilloo), and the sacred sites are managed according to different sets of regulations based on common property but including rules of restricted and regulated use, and that all our natural resources and cultural heritage sites are part of an integrated production and management system;

RECALLING that our customary laws have provisions for access to resources by other groups that have been living with us;

RECALLING that we, the Borana Oromo, have applied our *adaa-seera* (customary laws) by discussing issues in an open and transparent manner at various institutional assemblies and meetings, some of which are specifically dedicated to the management of natural resources and heritage sites;

ACKNOWLEDGING that in Ethiopia there is no a clear distinction between the roles and mandate of government and the roles of customary institutions, and that in our territory the government structure is replacing the customary structure at all levels down to the village, and in many sectors, including the management of natural resources;

RECALLING that our territory has been shrinking since the coming of Menelik's soldiers, that important natural resources and heritage sites have been alienated, and that inappropriate land use and water development are having negative impacts on our livelihoods, natural resources and biodiversity;

AWARE that our culture and mobile pastoral production strategy are fully compatible with the conservation of relevant biodiversity, and that our indigenous knowledge is a key asset to appropriate resource management;

We, therefore, declare that we will continue to make all efforts to conserve our landscape and its relevant biodiversity as a community conserved area in the territory we are still living in, according to the relevant international provisions and to the Ethiopian environmental policy, in full respect of our customary governance, our collective tenure system and mobile pastoral productive strategy, and our right to decide about development affecting our people and our land.

We invite the Regional Government of Oromia, the Government of the Federal Democratic Republic of Ethiopia, NGOs, donors and international organizations to support our efforts to improve our capacity to conserve and manage our natural and cultural patrimony, including the grazing zones, the forests, the traditional wells (particularly the *tulaa* wells), the *ardaa jilaa* (ceremonial grounds), the *booqee* (crater lakes), the cultural sites, the Borana cattle breed and the wild species, the birds and wildlife, the valuable grasses and trees.

We invite all relevant actors to support our social and economic needs; to promote development that is compatible with our community-based conservation and sustainable pastoral livelihoods; to device a mechanism whereby development agencies are accountable to our legitimate customary institutions; to enhance our capacity to independently assess the cultural and environmental impact of all private and public initiatives that may affect our landscape; and to support our advocacy efforts for policies and legislation that are appropriate for pastoral development, including respect of communal land rights and mobility, and efforts to achieve the legal recognition of our customary institutions and customary laws in relation to biodiversity conservation.

July 22, 2007 Yaaballo, Ethiopia

Annex 2.

Ethiopia: The Borana Conserved Landscape

Marco Bassi and Boku Tache

Paper prepared for the "Conserving Agrobiodiversity in Protected Landscapes" project, forthcoming in Thora Amend, Jessica Brown, Ashish Kothari, Adrian Phillips and Sue Stolton (eds.) *Protected Landscapes and Agrobiodiversity Values*, IUCN-WCPA, GTZ. <u>http://www.conservation-development.net/Files/CSBoranaNEW_Ethiopia_final_24_2_2007_1_(2).</u> doc

Abstract

The Borana Conserved Landscape is a large and officially unrecognized community conserved area in Southern Ethiopia, managed according to indigenous governance. It includes diverse ecological zones and a variety of key natural and human-modified resources, hosting a range of both domesticated and wild biodiversity of high international relevance. Within the broader landscape (IUCN Protected Areas Category V) certain zones are customarily managed under more restrictive rules of access and use, corresponding to the IUCN categories Ia (Strict Nature Reserve), Ib (Wilderness Area), and III (Natural Monument). In addition there is a government protected sanctuary and three government protected forests, the latter recently converted into co-managed protected forests by incorporating some elements of indigenous governance. A process is still needed to achieve a fuller recognition of the entire landscape by empowering the indigenous community.

Community conserved areas and indigenous conservation

In the Horn of Africa many pastoral and agro-pastoral groups have fully fledged and still operative system of indigenous governance. These are often well-known because of classic anthropological studies, although their relation to the environment and, specifically, to conservation is only recently receiving more attention, in particular as Community Conserved Areas are now recognized as a protected area governance type. Community Conserved Areas (CCAs) have been defined as 'natural and modified ecosystems, including significant biodiversity, ecological services and cultural values, voluntarily conserved by indigenous peoples and local and mobile communities through customary laws or ote effective mans" (Borrini-Feyerabend et al, 2004).

Communities that for centuries have been living in a certain territory with specific identities must have developed devices for their immediate survival and to ensure the long-term sustainability. Over time the natural landscape is shaped by eco-compatible human actions, while culture develops in strict association with the modified environment and the need to preserve the key resources.

Under these ideal conditions the implication for biodiversity is twofold. On one hand the need to preserve key resources induces a condition of 'indigenous conservation', defined as the direct or indirect action of environmental conservation based on culture and a collective identity (Bassi, in press). Conservation is achieved through norms and mechanisms of inclusion and exclusion, often operating at various collective levels. The savannah, arid lands and forests that have been selected by State authorities as sites for special biodiversity protection from the colonial time onwards are not 'natural' habitats, but human modified environments providing the habitat for specific wild species. On the other hand, human beings select specific domesticated breeds capable to thrive in their 'naturally' modified environment. In relation to pastoralism, the concept of agrobiodiversity should be centered on the interplay between wild and domesticated species, pastoralism being based on a direct interplay between the domesticated stock and the wild plants, and obviously heavily conditioned by the composition of wild grasses, bush species and trees. Also, as mobility and access to a variety of natural resources are a built-in feature of pastoralism, it is also necessary to consider the overall landscape where these activities take place.

In the Horn of Africa CCAs are often totally informal and unrecognized. The imposition of statutory law and new tenure systems, the transfer of decision making capacity to formal State officers, the economic marginalisation of many local groups, protracted warfare and processes of mass migration are progressively eroding the ideological base and legacy of indigenous conservation. Despite its decline, in many areas indigenous governance still provides an extraordinary conservation asset, as in the case of the Borana Conserved Landscape here described.

The Borana Conserved Landscape

The Borana are part of the Oromo, the largest nation of the Horn of Africa. The Oromo were politically characterized by their gadaa system of generational classes and the hereditary qaalluu (high priests). Being scattered over a large and diverse territory, the Oromo have established various gadaa centres in Ethiopia, each providing the governance structure for a certain portion of the territory. The Borana are a pastoral sub-group of about 400,000 people with a distinctive territory in the semi-arid lands of Southern Ethiopia and Northern Kenya. In Ethiopia, their customary territory corresponds to the southern portion of the former Sidamo Region as demarcated during the imperial and Derg time, from the confluence of the Ganale and Dawa rivers in the East to Lake Chew Bahir to the West. Some portions of this land were jointly used with other pastoral and agropastoral groups. The area between the two rivers is Libaan, while the highlands to the west of the Dawa is Dirree. In Kenya the Borana are nowadays concentrated along the border in Moyyale Marsabit and Isiolo districts. The Borana have a single encompassing gadaa system and five recognized qaalluu. They have managed to maintain their governance system, although the political influence of gadaa is now confined to Ethiopia, especially Libaan and Dirre, with competences informally recognized by the local administrators and limited to pastoral issues and Borana internal affairs.

The whole of the large territory of the Borana, and particularly the Ethiopian homelands still under *gadaa* governance, can be considered a community conserved landscape, due to the variety of specific rules and practices that have historically assured its sustainable and eco-compatible use. It includes diverse ecological zones and a variety of key natural and human-modified resources. This is fully compatible with IUCN Protected Areas Management Category V, Protected Landscape/Seascape (Phillips 2002). As described below, within the broader landscape certain zones are customarily managed under more restrictive rules of access and use. Taking into consideration the emerging trends in interpreting the IUCN categories (Borrini-

Feyerabend et al. 2004: Dudley et al. 2004), the ceremonial grounds are compatible with IUCN categories Ia, Strict Nature Reserve, the juniper forests with category Ib, Wilderness Area, the volcanic craters and the traditional wells with category III, Natural Monument, all referred to the CCAs governance type. The same landscape also includes some government managed protected areas, and some have recently been converted into co-managed protected areas.

The different resources are all conceived as strongly complementary and are the shared heritage of the whole community. This added value is communicated through a process of sacralization, as in the following part of a prayer:

Dirreen nagaa	Peace for Dirre
Dirrii liiban nagaa	Peace for Liiban
Tulaan sallan nagaa	Peace for the nine Tulaa wells
Baddaan sadeen nagaa	Peace for the three Forests
Malbee golboon nagaa	Peace for Malbee and Golboo
Booqqee sadeen nagaa	Peace for the three Booqqee
Baddaa gammoojjiin nagaa	Peace for the forest and the drylands

The management of rangeland

Liiban and Dirree are the two main macro-regions of the Borana in Ethiopia, including both critical wet and dry season pastures. Malbee-Golboo are the dry lowlands in northern Kenya, along the Ethiopian border, a critical wet season pasture. The sound management of the rangeland is promoted through norms of inclusion/exclusion designed for pastoral activity and known as seera marraa bisaanii - 'the law of grass and water'. The Borana 'law of grass' shares the basic principles of most East African pastoral groups. Although no family can be directly denied access to the rangeland, the law differentiates between dry season pastures (with permanent water points) and wet season pastures (with good grass but only accessible during rains). It imposes the maximum use of wet-season pasture whenever possible, thus minimising pressure on the most intensely utilised rangelands served by permanent water points. In practice, this is achieved by dividing lactating, thus less mobile, cattle from dry stock, and other stock species. There are also provisions for restricting access to certain areas (kaloo), kept as reserve for certain stock categories during the dry season. These norms and practises have a direct impact on the ecology of the rangeland, particularly on the composition of grass species. Additional practices contribute to the control of the composition of the bushes and trees, such as controlled fires, selective cutting of bushes for firewood and the periodical movement of villages to avoid depletion of trees.

The conservation ethos is not always expressed in explicit terms. Indigenous conservation is often indirectly achieved in accordance with culturally-specific values, beliefs and ritual practices. For instance, the Borana share with the other Oromos cultural beliefs associated with particular trees. The most important is the Sycomoro (*Ficus sycomorus*) (vernacular: *odaa*), symbolically associated with the *qaalluu*, the high priests of the society. Other trees are protected because their branches are used in rituals or to make ritual/cultural sticks and objects or in relation to livelihoods, for the production of edible fruits for humans and livestock (i.e.: *Acacia tortilis* - vernacular: *dhaddacha*) or their positive ecological interaction with the growth of forage. Further, certain tree species are planted close to the burial place as part of the funerary rituals. These trees are carefully cared for later on. The overall result is a species-selective tree management at the country level. In the savannah areas poverty is forcing some families to engage in charcoal production. However, the burning of protected trees still raises

strong social concern. The Borana also strongly complain about the destructive tree-cutting practices by groups of non-Borana resettled by the government in their land.

The management of water

The second set of customary law indirectly regulating the ecology of the rangeland is the 'law of water'. This law is highly articulated and peculiar to the Borana and their environment. It is characterised by the presence of traditional wells (eela), distributed in localities where the aquifer can be reached⁴. Access to key dry-season rangeland is achieved by gaining access to these permanent water points. Nine of these well complexes - the tulaa sallan (the nine tulaa wells-complexes) - have a special ritual and symbolic relevance, for the particular qualities of the water and the surrounding environment. The tulaa wells can be as deep as 40 metres in the localities of Meelbanaa, Irdar (Egdar), Goofa (El Gof), Laye (El Lae), Dhaasi (Dhas), Weebi, Waacille, Hiigo, and Gaayo. The wells have different norms regulated by the investment required for digging, based on clan affiliation and assignment of both individual and collective ownership rights. and rights of access, i.e. priority to clans and families that have actually invested in it, but also a limited quota for outsiders, including members of other ethnic groups and wildlife (Bassi 2005; Oba, 1998). There are also special provisions to ban any permanent or temporary human settlement in the vicinity of the wells. The sites of the wells thus appear to be maintained in a fully natural state, except for the daily movements of thousands of livestock. The cattle dung is accumulated outside each well for decades or centuries, a reserve of manure in the long-term ecological cycle. In the normal cycle of well excavation and collapse, wells serving over-exploited rangelands are abandoned and new are developed elsewhere.

The particular distribution of the well clusters have encouraged the Borana to select, over the centuries, their particular breed of zebu cattle, internationally known as the 'Boran breed' after the attention received in several studies promoted by ILCA/ILRI. The Borana cattle are able to walk long distance in hot and sunny climates, normally drink every third day and are very efficient converters of pasture forage into body fat which are used during period of drought. They have the capacity to carry weight easily after the dry season and provide an optimal balance of meat and milk production for market and household consumption. Because of their outstanding performance in hot and dry climates the Boran breed has from the 1920s onwards been introduced in commercial schemes and cross bred in Kenya, Tanzania, Uganda, Democratic Republic of Congo, Zambia, Australia, the United States, Brazil and Mexico (ILRI website,). Recently, a proposal has been formulated to preserve the 'pureness' of the breed in Boranaland (Zander and Mburu 2005).

The three days watering interval allows access to rangelands located up to one and half days walking distance from the wells, assuring access to poorly served areas even during the dry season, with obvious implications in terms of reducing overstocking and on long-term grass composition of the different zones. Socially this three days rotation also allows well access to a larger number of pastoral units and the allocation of each day to different clans, thus fostering inter-clan cooperation and reducing the potential of inter-clan competition and conflict. In economic terms, the Borana cattle

⁴ The deep wells are known as the "singing wells" because of the way they are operated, giving the impression of songs coming directly from the earth.

have been the main beef export from Ethiopia to the Gulf States and a major source of foreign currency during the socialist period of Ethiopia.

FIGURE 1. Cross-section of a tulaa well

PICTURE 1. View of a traditional wells site in vicinity of a volcanic lake, intensively used by livestock and humans, but kept in a 'natural' state, free from settlement and agricultural practices

PICTURE 2: Borana cattle in a foora camp, 2006

The juniper forests

The *baddaa sadeen* are the three largest juniper (*Juniperus procera*) forests in the Borana Conserved Landscape; Baddaa means "forest with tall trees" and "a dark green forest". As in several other forests in the Horn of Africa, they are too humid for permanent pastoral settlement. However, some open patches contain excellent pasture and provide permanent springs. They were therefore used as dry-season pastures. The forests have an important function as last refuge for grazing in case of drought, and are a reserve for medical and ritual plants. They were not subjected to special management provisions, apart from the very strict prohibition against starting fires in the forest.

The forests have a high symbolic value; they are conceived as something belonging to the "outside" - the realm of nature, being close to God, the alolla) (Kassam and Megerssa, 1994). They are also a metaphor for human society, hence highly valued in social terms. Gurracha Duuba, a Borana elder living outside the Manquubsa forest near Nagelle town, during an interview conducted in September 2002, clearly articulated these values. The Manquubsa forest was nearly destroyed by a fire in 1999 and the remaining area was seriously affected by illegal and selective cutting of juniper trees for house construction in the town:

"The juniper trees are like the Borana elders (*jaarsa*): they stand taller than the others and have a long white beard (whitish lichen-*arrii* is often hanging on the juniper's leafy branches). Just as there cannot be Borana society without elders, the *baddaa* (forest) will follow into chaos when all the junipers are cut or destroyed. I was told long ago [referring to an oral prophetic text] that one day we would have seen a big light from very far and the *baddaa* would disappear...[referring to the great 1999 fire]"

The juniper trees *are* thus the elders and the forest *is* the Borana society, since there is a dynamic link between the two. This link is reflected in prophecy. The prophetic text the elder was referring to is well known by the community and provides a list of events representing the reverse of orderly social life. These events announce a cosmological crisis, an apocalypse (Bassi and Boku, 2005). The 'light' (i.e. the fire) destroying the forest is thus equated to the disappearance of orderly human society and is conceived as a step towards, when translated in western scientific language, an ecological disaster at a global level. The symbolic inter-dependence between the forest and human activity is further qualified in the rest of the interview:

"The forest attracts the clouds. It makes them stop and rain. It also produces rain: in the forest there is always humidity and mist. It produces rain. We can see it by the fact it has springs and produces all-year-round high quality pasture. Due to the forest destruction now the nearby plains (Diida Liiban) and other places do not receive enough rain anymore, and many of the permanent springs in the forest have dried up. But rain is still good in my place, Xuxxuffe, due to the remaining patch of forest nearby".

Gurracha Duuba illustrated his points during a walk in the forest. He showed us several surface water points that have dried up during the last few years. He also showed us how deep they have to dig now to find the water in the same point, requiring a line of 10 standing men to draw water to surface. The analogy with theories of global warming, is clear, although the cause-effect relation between forest and climatic change here is at a local scale.

PICTURES 3a and 3b. "The juniper trees are like the Borana elders (*jaarsa*): they stand taller than the others and have a long white beard"

PICTURE 4. Gurracha Duuba shows a well where previously water was found at surface *The volcano craters*

The *Booqee sadeen* are the three volcano craters found in Borana territory, providing different salts and high quality water for both human and cattle consumption. They are kept open and can be used by wildlife, but access by the community is regulated in accordance with a balance between customary and statutory laws, the latter imposing a tax on salt extracted by the local community. When the government announced in national newspapers a public bid for industrial mining in the craters, the entire community mobilised and managed to conserve the customary use of the *Booqee*.

PICTURE 5. Crater lake producing minerals for livestock (and wildlife) consumption *Borana governance*

The different resources discussed above together ensure the maintenance of a viable pastoral system. They are common resources, in the sense that all pastoral units have the potential to use the territory and gain direct or indirect rights of access in response to unpredictable climatic patterns. However, both management and access are strictly regulated through practice, customary norms, belief systems and laws of inclusion/exclusion, which protect the resources from outsiders and regulate the internal allocation between groups, sub-groups, individuals and families.

This is achieved through indigenous governance built on the highly complex gadaa system of generation classes (Legesse 1973). Every eight years a new generation class, represented by elected leaders from the major clan divisions, takes the leadership of the yaa'a, the mobile ritual villages of the Borana. Ceremonies in different sacred sites scattered over the landscape are performed, mostly in the shade of a Sycomoro tree. The tree and the surrounding area, known as ardaa jilaa, are fully protected and should be maintained in a natural state (Taddesse 1995). The representatives of the gadaa generation class are also responsible for the organisation of the Gumi Gayoo, the general assembly of the Borana held once in every eight years. The event lasts over a month and involves thousands of people in democratic debates. The general assembly also serves as supreme court of the Borana and their legislative body. Formal customary laws (seera) are orally announced on these occasions. Law-enforcement is assured through a highly articulated and diffuse ssembly structure. Assemblies are led by different type of titled leaders. The abbaa gadaa, the gaalluu and the hayyuu are the most authoritative, having served for not less of 16 years in one of the Borana yaa'a. All titled leaders and influential man are called *jaarsa*-elders, a term implying political prestige (Bassi 2005).

Borana governance thus well illustrates the mechanisms of indigenous governance, based on the political philosophy of each group, and manifesting itself through a number of correlated visible elements, including:

- norms (customary law and practice) and procedures regulating the decisional processes, including law making, conflict management and dispute settlement
- the settings where binding decisions are made, normally in various councils and meetings

- customary institutions, defining political and ritual roles and political and juridical personnel
- ritual practices.

Symbolic constructs of social and economic groupings, norms, juridical and judicial procedures, culturally-specific sanctions, political and juridical personnel and local or indigenous knowledge are all inter-connected elements taking shape in relation to the specific territorial asset.

PICTURE 6. A Sycomoro (*Ficus sycomorus - odaa*) marking a ritual ground. The Borana only manage to protect the tree, while the surrounding area is now cultivated by new-comers.

PICTURE 7. The gadaa leaders moved to Gayoo to organise the General Assembly of the Borana

PICTURE 8. The Gumi Gayoo general assembly

Agrobiodiversity and the State-induced decline of the conserved landscape

This environmentally sound management of natural resources assured the development and conservation of a unique agrobiodiversity heritage in Borana territory.

To date ecological studies have focused on the direct inter-relation of stock with wild species, hence primarily on vegetation dynamics and their response to grazing (Oba et al 2000; Coppock 1994), from the point of view of both indigenous and scientific knowledge (Oba and Kotile 2001). In addition to the Borana cattle breed, specific to this territory and later disseminated world-wide, there are several important breeds of goat, sheep, donkey, horse and camel. Very little is known on the relation between the pastoral-modified environment and other wild biodiversity; although it is documented that the Borana conserved landscape provides the habitat for a variety of important, globally-threatened, range- restricted and biome-specific wild species (EWNHS, 1996).

The Acacia-Coommiphora open woodlands and bushlands of the area support 43 species of mammals, including the endemic Swayne's Hartebeest (*Alcelaphus buselaphus swayeni*), and 283 species of birds, including the endemic Abyssinian Bush Crow (*Zavattariornis stresemanni*), the White-tailed Swallow (*Hirundo megaensis*) and the Sidamo Lark (*Heteromirafra sidamoensis*). It is possible that the Abyssinian Bush Crow, found only in the land of the Borana, is actually dependent on a pastoral-modified ecology. This species, whose classification has been difficult, is in fact only found in a restricted range, in the middle of the *tulaa* wells area; which is locally known for having been intensively used by cattle-pastoralists for several centuries. This exclusive association cannot be hypothesised for the globally-threatened and little-known Sidamo Lark, found in a small area southeast of Nagelle Borana (Robertson 1995).

Dry evergreen forests and patches of forests with *Juniper procera* are also important because they occur in low rainfall habitat (below 1,000 mm) and they host the restricted-range Prince Ruspoli's Turaco (*Tauraco ruspolii*) (Borghesio 1997). Plants of wild coffee and chat (an evergreen shrub widely grown for its mild narcotic effect) are also found in the forests scattered through Boranaland.

From the 1970s onwards the Borana environment was confronted with major land use changes. The socialist government limited mobility within the ethnic territory and promoted agriculture. The situation degenerated further after the change of government in 1991 with the political marginalization of the Borana. UN-backed returnees programmes and other development initiatives supported by international funds meant that entire portions of Borana territory, including two tulaa localities, were entrusted to neighbouring groups. More land resources were lost by the Borana in the process of economic liberalisation and globalisation. Large ranches were acquired by international investors and extensive portions of land around the towns, located in critical dry-season pastures, were assigned to town dwellers and to non-Borana immigrants for small holding cultivation. Since common property and indigenous land rights are not recognised in Ethiopia, the Borana's territory has been treated as if their common property land were 'no-man's land', to be assigned to whoever claimed it. The Borana have been squeezed into the driest pockets where their grazing land was bound to deteriorate, and deprived of their drought grazing reserves (Oba, 1998). The only possible survival strategy for the Borana has been to engage in farming in the remaining least suitable places, both to obtain some food during years of good rain and to secure some land rights to the community in the long run.

The Borana institutions and norms appear increasingly unable to cope with the development and resettlement policies, and relevant decisions on land allocation and land use are simply imposed upon them by the State administration. In addition, massive immigration of people who do not share the values attached to Borana governance made the latter ineffective at the landscape level, with a tremendous overall de-legitimizing effect. The impact on biodiversity conservation is also tremendous, despite the establishment of some formal Protected Areas within the Borana territory by the Socialist government. The open woodlands, especially in the wetter zone providing the habitat of the Abyssinian Bush Crow, are becoming smaller and fragmented. Unregulated overgrazing is turning them into dense bushes. Agricultural encroachment and overgrazing are taking place even within the Yaballo sanctuary, established to protect this outstanding biodiversity complex. A recent road-side count of the Abyssinian Bush Crow by Borghesio and Giannetti (2005) indicates a population decline of 80 per cent since1989.

The juniper forests (*baddaa*) of the Borana conserved landscape are devastated. The smaller patches scattered over the landscape are almost completely destroyed. The three largest forests (*baddaa sadeen*), were classified as National Forest and accordingly protected and managed by the government. All were seriously affected by the fires in 1999, all are seriously endangered by commercial timber extraction and agricultural encroachment by non-Borana new-comers. Of the three, the Manquubsaa Forest (Nagelle) has nearly entirely disappeared. The Arero forest remains dense only in some blocks, having entirely disappeared in the remaining parts, while the Yaaballo Forest is highly exploited with some remaining dense patches (SOS Sahel - Ethiopia assessment, 2002; Borghesio et al. 2004).

During field-surveys conducted by the authors in 2002 with SOS Sahel-Ethiopia, it appeared that nearly all the ceremonial grounds previously held in a natural state by the Borana were affected by the development of new settlements and extensive farming, mostly practiced by non-Borana new-comers, or were incorporated into private ranches managed by external investors. The customary leaders have been forced to negotiate access to their holy grounds at the time of the ceremonies.

Although the international cooperation is strongly supporting the development of new boreholes, the Borana still manage to self-maintain those traditional wells they can still access. However, the system of norms and the enforcing mechanisms that were preventing settlement close to wells are loosing efficacy. While most pastoralists still keep their mobile villages far from the *tulaa* wells, some wealthier Borana have started to construct permanent houses and shops in vicinity of the wells, a change that can fast develop into the formation of a new town, being close to the water source. Unfortunately this changing pattern of land use that is destroying the sustainable pastoral management and the dependent biodiversity is not producing any relevant economic gain. Boranaland is not suitable for agriculture due to low and irregular rainfall. Both the pastoralists and the immigrating farmers only manage to survive on

Valorizing and revitalizing Borana governance

food donations from abroad.

In the previous paragraphs we have shown a fundamental convergence of interests and a comparable conservation ethos between the Borana community and global conservationists, despite indigenous conservation being primarily motivated by sustainable livelihoods and ritual. We have also described how customary governance is under heavy external pressure and currently incapable to deal with the new challenges. We are therefore challenged with the question of how to bridge global biodiversity goals with the values and practices of the local and indigenous communities, respecting the basic principles of equity and building on local cultural notions and models. In other words, what possibilities and constraints are there to profitably apply a Community Conserved Areas (CCA) approach?

Applying CCAs in the Horn of Africa mainly means recognising, valorising and formalising indigenous (or customary) governance and customary tenure systems based on common property. The provisions for collective rights guaranteed under International Labour Organisation (ILO) Convention No. 169 and the Draft United Nations Declaration on the Rights of Indigenous Peoples - with their explicit reference to customary laws, customary leadership, customary legal and decisional procedures, customary land tenure and self-determination - obviously provide a paramount guidance. Unfortunately collective rights are hardly recognised in the legislation of Ethiopia or any other of the countries of the Horn of Africa. Collective rights may implicitly be considered or recognised as a secondary claim in some sectoral law or policy document, usually under the heading of 'community' or 'local community'. However, the concept of 'community' or 'local community', lacking any reference to the environment-specific cultural elements, is too generic for indigenous conservation to regain efficacy. Some recent guidelines and recommendations developed in the context of the IUCN and the CBD may provide more specific guidance to promote appropriate policies and legislation at national level, but more work in this area is clearly needed.

Even in the absence of specific country-level legislations, some interesting attempts to realize the value of indigenous conservation have been made on the ground, mainly in relation to collaborative forest management. In a CCA approach reference to customary leadership is crucial. The Borana Collaborative Forest Management Project was established in 1999 by SOS Sahel with funds from the EU to stop the process of

serious degradation of the three largest juniper forest of Borana Zone. The project staff implemented an in-depth analysis of tenure, resource use and customary governance. The project has been working to rebuild respect and recognition for the gadaa system as a legitimate governance structure and has acknowledged the gadaa leaders as primary stakeholders and key partner to the Forest Department (Boku and Irwin 2003). The main customary leaders have systematically been involved in the preparatory debates. However, the formal recognition so far achieved does not involve Borana governance as a whole, as only customary leaders and elders have been included in new, locally established management committees. This limits the relevance of the action to only one component of the Borana conserved landscape, the forests, and even with this limited scope there are problems of implementation. According to Borbor Bule, a well-known local elder, the sustainable management of the forest will be possible only when the management responsibility and authority are entrusted to elders who are the custodians of the resources. The elders should have the power to sanction, based on explicit agreements by which the traditional structure has a leading role and the administrative structure a supporting one (Boku and Irwin 2003).

Customary tenure, collective rights and primary stakeholders

Indigenous conservation is primarily based on customary tenure and, especially for pastoralists, on communal use of resources. Once the customary tenure system is replaced, indigenous governance and customary law no longer make any sense and indigenous conservation is gone forever. Legitimizing customary tenure in the first place means recognising the collective rights of the indigenous communities. But even if the legal environment is not conducive, there are a number of alternative solutions in the context of environmental protection and collaborative management. In the Borana Conserved Landscape the rapid environmental deterioration is associated with competing claims between the autochthonous communities and other encroaching groups or opportunistic new-comers, claiming access to the same natural resources. Both the autochthonous and newcomers belong to the 'local community' category. They are simultaneously using the local natural resources. Both have claims and rights, though referring to different legitimising principles. Dealing with conservation implies making choices on legitimate claims, giving priority to those who have established long-standing associations with the natural resources. A culturally-grounded approach to environmental conservation hence requires a clear differentiation between primary and secondary rights. We propose therefore that primary rights are ascribed to the communities and groups that, through an historical association with a territory, have developed cultural and functional devices for the conservation and the sustainable use of natural resources.

It has rightly been observed that a superficial application of stakeholder analysis implies a misleading sense of equality between stakeholders (Hughes 1996). Grazia Borrini-Feyerabend suggests criteria to differentiate between stakeholders in collaborative management, including existing rights to land or natural resources, continuity of relationship with the resource, unique knowledge, historical and cultural relations with the resource at stake (Borrini-Feyerabend, 1996). An ODA report suggests differentiating between 'primary stakeholders' having rights, and 'secondary stakeholders', simply having interests (ODA, 1996). Putting theory into practice is not however so easy, and the identification of the rights-holders in the Borana landscape was considered complex. In the Borana Collaborative Forest Management Project, it was decided therefore to differentiate between primary and secondary stakeholders on

the base of direct or indirect use of the forest, whilst acknowledging the relevance of historical and social factors in determining rights over the resource (Boku and Irwin, 2003). In order to overcome such difficulties, it is thus advisable to clearly define 'primary stakeholders' with reference to cultural and historical criteria. Accordingly, we propose to recognize *primary stakeholders those members or sections of the local community that can legitimately claim primary rights on the resource at stake.*

Need for institutional development

The process of recognition of customary governance implies a process of harmonisation with national and international demands. This requires specific actions at national level, in terms of recognising the relevance of collective and cultural rights and customary tenure systems through policy, legislation and guidelines, as well as at a local level, in terms of re-contextualisation and innovation. This effective revitalisation of indigenous governance requires more than a simple codification of customary laws (i.e. directly incorporating them into the legal framework) or undertaking negotiations with the existing customary leaders. It requires attention for all the interrelated elements of indigenous governance. In the case of Borana Conserved Landscape it is possible to rely on the variety of customary bodies and institutions to stimulate the revision of norms. However, customary leaders and local actors, who may be marginal to modern processes and training, are often incapable to deal with new threats and situations. It is therefore necessary to enhance the capacity of the customary leadership to deal with new challenges. This can be achieved by adhoc capacity development initiatives, and by institutional change at the local level where there is an interface between indigenous and State institutions, modern and indigenous knowledge.

References

Bassi, in press. "Community Conserved Areas in the Horn of Africa", *parks*, 16 (1).

Bassi, M. 2005. *Decisions in the Shade. Political and Juridical Processes among the Oromo-Borana*. Trenton: Red Sea Press.

Bassi, M. and Boku Tache. 2005. "The Oromo Eschatology: the Prophecy of Areeroo Boosaroo Narrated by Borbor Bulee and Guyyoo Dambii"; *The Journal of Oromo Studies*, 12 (1&2), pp 174-222.

Boku Tache and B. Irwin. 2003. "Traditional Institutions, multiple stakeholders and modern perspectives in common property. Accompanying change within Borana pastoral system", *Securing the commons*, Working paper No. 4, IIED, SOS Sahel.

Borghesio and Giannetti. 2005. "Habitat degradation threatens the survival of the Ethiopian bush crow *Zavattariornis stresemanni*", *Oryx*, 39 (1), 44-49.

Borghesio, L. 1997. 'Field observations on Prince Ruspoli's Turaco *Tauraco ruspolii', Scopus* 19 (2): 83-91.

Borghesio, L. et al. 2004. 'The present conservation status of *Juniperus* forests in the South Ethiopian Endemic Bird Area', *African Journal of Ecology*, 42, pp. 137-143.

Borrini-Feyerabend, G, Ashish Kothari and Gonzalo Oviedo. 2004. *Indigenous and Local Communities and Protected Areas. Towards Equity and Enhanced Conservation*. Cardiff University and IUCN.

Borrini-Feyerabend, G. 1996. Collaborative Management of Protected Areas: Tailoring the Approach to the Context. Gland: IUCN.

Coppock, L. 1994. The Borana Plateau of Southern Ethiopia: Synthesis of pastoral research, development and change, 1980-91. Addis Ababa: Ilca.

Dudley, N., J. Harrison and P. Rosabal. 2004. 'The future development of the categories system', *parks*, 14 (3), pp. 72 81.

EWNHS, 1996. *Important Bird Areas of Ethiopia. A first Inventory*. Ethiopian Wildlife and Natural History Society: Addis Ababa.

Hughes, D.M. 1996. "When Parks Encroach Upon People. Expanding National Parks in the Rusitu Valley, Zimbabwe", *Cultural Survival Quaterly*, pp. 36–40.

ILRI website, AGTR, <u>http://agtr.ilri.cgiar.org/BreedInformation/breedpg/cattle/Boran.htm</u>, 15/02/2007.

Kassam, A. and Megerssa, G. 1994. "Aloof Alollaa. The Inside and the Outside; Boran Oromo Environmental Law and Methods of Conservation", in David Brokensha (ed.) *A river of Blessings. Essays in Honor of Paul Baxter*, pp. 86-96. Syracuse: Maxell School of Citizenship and Public Affairs, Syracuse University.

Legesse, Asmarom. 1973. *Gada. Three Approaches to the Study of African Society*. New York: Free Press.

Oba G. and D.G. Kotile. 2001. "Assessments of Landscape Level Degradation in Southern Ethiopia: Pastoralists versus Ecologists", *Land Degradation & Development*, 12, pp. 561-75.

Oba, G. 1998. "Assessment of Indigenous Range Management Knoweldge of the Booran Pastoralists of Southern Ethiopia". GTZ-Boran Lowland Pastoral Development Program and Oromiya Regional Bureau for Agricultural Development, Nagelle/Borana, Ethiopia.

Oba, G., E. Post, P.O. Syvertsen and N.C. Stenseth. 2000. "Bush cover and range condition assessments in relation to landscape and grazing in southern Ethiopia", *Landscape Ecology* 15, pp, 535-546.

ODA. 1996. Stakeholder Analysis. London: HMG.

Phillips, A. 2002. *Management Guidelines for IUCN Category V Protected Areas: Protected Landscape/Seascape*. Cardiff University and IUCN.

Robertson, I. S. 1995. "First field observations on the Sidamo Lark? *Heteromirafra sidamoensis. Bull. Brit. Orn. Club* 115, pp. 241-243.

Taddesse Berisso. 1995. "Deforestation and Environmental Degradation in Ethiopia: the Case of Jam Jam Province", *Northeast African Studies*, 2 (2), pp. 139-155.