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Regulating the commons in Mauritania:
Local agreements as a tool for sustainable natural resource management

Karl P. Kirsch-Jung and Lars T. Soeftestad [1/]

Abstract

The present situation in Mauritania with regard to management of natural resources is complex. There is tribal law, colonial French law (Code Napoleon) and modern state law, layered on top of each other as it were. These legal codes, in and off themselves, are not necessarily suited to tackle the situation of local natural resource management (NRM) today. In connection with local-level management of the commons, specifically land, relating to and using these different and often contradictory legal codes represents a somewhat bewildering picture. As a result, conflicts between specific rules in these codes at times arise.

In this situation, efforts to achieve sustainable land management have to work within and negotiate the delicate balance between these codes. At the same time, these efforts have to relate to and work with relevant stakeholders, specifically local resource users and public sector and political structures at the national level. One such approach is to establish 'local agreements' (LAs), here understood as constituting a set of regulations drawn up in a participatory manner by as many stakeholders as possible, in order to promote equitable and sustainable NRM. The LA aims to bring together divergent interests and overcome the danger of one stakeholder's interest dominating to the exclusion of others, in particular, vulnerable groups such as transhumant pastoralists.

The paper presents ongoing work on establishing LAs in the south and southeast of Mauritania by GTZ and World Bank. Following an overview of the legal situation and its evolution, the ongoing work is presented, including experiences and outcomes. The analysis discusses related approaches and efforts elsewhere in Sahel, raises some problematic questions on how to increase the effectiveness of LAs, and concludes with lessons for future applications of this approach for regulating commons and achieving sustainable land management.

The general context and framework for this paper, including, in particular, the specific focus on local agreements (LAs), is decentralized natural resource management (NRM) in the extensive dry land savannah and wetland areas in south and southeast Mauritania.[2/] Work on decentralization results from parallel and reciprocally related that take place mainly in the public sector and in civil society. This is described and analyzed under the following headings: in section "Background" elements of the general developmental framework and knowledge for work on NRM are presented, while section "The developmental construction of local agreements" outlines some of the specific developments that led to this approach. The next section, "Local agreements in Mauritania" presents relevant elements of the macro-level and micro-level situation pertaining to the concern with LAs, while the following section present the GTZ-supported program ProGRN. This is followed by a "Discussion" section and some concluding remarks.

1/ Karl P. Kirsch-Jung, GTZ - Coopération Technique Allemande, Directeur du ProGRN, Programme Gestion des Ressources Naturelles en Mauritanie, Nouakchott, Mauritania, email: karl-peter.kirsch-jung@gtz.de; and Lars T. Soeftestad, President, Supras Consult, Kristiansand, Norway, email: lsoeftestad@supras.biz.

2/ Any broader understanding or what is covered by the term "NRM" notwithstanding, in this paper the term "NRM" is used with reference to soil and land cover, and does not include subsurface resources.

BACKGROUND

Development work consists of theoretical and applied work that results from each other – and that feeds each other – in a continual dialectic process. New theoretical insights are being operationalized and tried out in the field. Conversely, practical experiences in the field are transformed, generalized and synthesized into analytical and theoretical propositions. As the fronts or learning and results are continually moving forward, it should not be forgotten that these advances result from and build upon work, learning and insights on by generations of dedicated persons. This section traces briefly the intellectual history – in its various theoretical, analytical and applied aspects – of the work on LAs that is reported on here. The reason for presenting these experiences and insights is not to imply that the approach of LAs in any way represents the apotheosis of work in sustainable management of natural resources. The purpose is twofold: (1) Create linkages and continuity between these other important advances and the present concern and (2) Lay the foundations for the present focus and, through this, present the complexities – as well as rewards – of implementing this approach.

The rationale of the collective enterprise that so many are engaged in is to understand, in order to increase impacts and results. As increasing numbers of stakeholders – from the early category of "researcher" to stakeholders in the public sector, civil society, and the private sector, both in the North and the South – have become active, the possibility for increasing the impacts have increased dramatically. So too has the complexities of working with, within and between these stakeholders. The following key intellectual strands of development foci and work are representative of this, as they all lead to and/or are representative of increased involvement and activity of stakeholders, and in turn presuppose such involvement and activity:[3/]

- *Social analysis*. Spearheaded by the World Bank beginning in the early 1990s, itself tracing its roots to civil society and work within the environmental movement as well as to work originating within the research and academic community. From early on this body of work was mainstreamed to the many stakeholders in the development community.[4/] A number of specific directions as well as specific tools have been developed over the years, including participatory rural appraisal (PRA), social assessment, stakeholder analysis, and beneficiary assessment. Social analysis is, in its focus on the conditions for – and detailed workings of – participation, closely connected with participatory approaches,
- *Participation and participatory approaches*. Concerned with participation, both as found in traditional institutions and within social organization as well as in the context of applied development interventions. Participation is understood, at one and the same time, as a goal with development interventions as well as a means to achieve the goals with such interventions. More generally, participatory approaches is part and parcel of a host of efforts that center on concerns with, among others, corruption, democratization, empowerment, gender, governance and transparency. Social analysis in large measure furthers – as well as is based on – this work,
- *Law and natural resources*. The interest of law in natural resources largely followed from a concern with the realization of – and increasing focus on – the fact of different cultures having widely different understanding of what is considered as property, how such traditional or indigenous property rights systems are to be

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3/ Definitions of all concepts and terms used in this paper are available on the website of the Community-Based Natural Resource Management Network (CBNRM Net), at: www.cbnrm.net/resources/terminology.

4/ The methodological approach of "situation analysis", as developed by UNEP (2005), is a case in point.

understood as complete legal codes to be analyzed, and how they interact. From an academic concern, to a large extent influenced by anthropology, such traditional knowledge of the relationship between Man and Nature, and how cultures in developing countries and in countries in transition view, define and utilize natural resources in a common property context, has become important for understanding the relevant local-level context in connection with development interventions. In a situation of legal pluralism the interaction of different legal codes, traditional and imposed ones, together with the applied implications of this, is focused upon. A goal with this work is often regulatory or legal reform. There is a close connection with institutional analysis. A major conclusion to come out of this body of work is that it is an over-simplification to view law as a unitary institution of great efficacy, as the public sector in many developing countries are prone to do (van Dijk 1996),

- *Institutions and institutional analysis*. The term institution is used here both in its commonsensical understanding as organizations that contain people, and in its more specific understanding, as found within institutional economics, of rules that provide context and structure and define relations between people. Within the specific context of NRM, institutional arrangements include instruments for defining and enforcing property rights, including formal procedures, social "customs", beliefs and attitudes which determine the legitimacy and recognition of these rights (Bingen 2001; SLSA 2006; Uphoff 1992). Institutions are understood as patterns of behavior which persist over time, but that at the same time are being formed, negotiated and in decline, which is what institutional analysis is concerned with, and

- *Co-management*. Here understood as a situation in which two or more stakeholders negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources.[5/] More specifically, co-management is: (1) A pluralist approach to managing natural resources, incorporating a variety of partners in a variety of roles, generally to the end goals of environmental conservation, sustainable use of natural resources and the equitable sharing of resource-related benefits and responsibilities, (2) A political and cultural process par excellence: seeking social justice and "democracy" in the management of natural resources, (3) A process that needs some basic conditions to develop, among which are: full access to information on relevant issues and options, freedom and capacity to organize, freedom to express needs and concerns, a non-discriminatory social environment, the will of partners to negotiate, and confidence in the respect of agreements, (4) A complex, often lengthy and sometimes confused process, involving frequent changes, surprises, sometimes contradictory information, and the need to retrace ones own steps, and/or (5) The expression of a mature society, which understands that there is no "unique and objective" solution for managing natural resources but, rather, a multiplicity of different options which are compatible with both indigenous knowledge and scientific evidence and capable of meeting the needs of conservation and development (Borrini-Feyerabend et al 2000; FAO 2005).

These aspects of the development agenda, variously referred to – and understood as – approaches, tools, intellectual stances, and/or research agendas, are here presented in a more

[5/] Co-management is also referred to as collaborative management, joint management, mixed management, multi-party management, participatory management, and round-table management.

or less logical order, starting with analysis and ending with practical implications, for managing people, knowledge and resources. Needless to say, they are all utilized, often in combination with each other, and are continuously being developed and changed. In terms of efforts at integrating and synthesizing these aspects – especially concerning their applied and theoretical aspects – the approach of community-based natural resource management (CBNRM) is put forward as a useful approach and process, and CBNRM Net as a key resource (van der Heijden, Pryor and Soeftestad 2006; Soeftestad 2003; Soeftestad and Kashwan 2004).[6/]

THE DEVELOPMENTAL CONSTRUCTION OF LOCAL AGREEMENTS

A "local agreement" is here understood as the coming together of the analytical and applied strands of work presented above, namely: social analysis, participation and participatory approaches, law and natural resources, institutions and institutional analysis, and co-management, together with specific developments to be spelt out below, notably *gestion des terroirs*.[7/] Exactly how this has happened will only be hinted at here, partly because it is outside of the scope of this paper, and partly because it is very complex, as it is ongoing and unfolding, and the cursorily treatment given it here certainly do not give justice to the breadth and complexity of these developments. Given the evolution of LAs, elements of the developmental construction of the approach of LAs will be presented separately for the English/Western and French/West African intellectual and scientific domains. Needless to say, there are important overlaps and cross-influences, and this approach is partly chosen as a heuristic device.

Developments in the English / Western domain

Here, two broad foci are recognized: property rights and collective action. Regarding property rights, it can be characterized as being initially analytical and theoretical, following from its basis in academia and research. Initially, the applied concern was more implied than anything else, the idea appearing to have been that, once knowledge of the existence of different rationales for how to define and utilize natural resources became available – specifically as related to common property – these insights would be put to good use. Gradually a stronger concern with how to act and work applied, based on the vast knowledge that accumulated, came about. Key analytical and applied terms are: 'commons', 'common property rights', 'customary tenure, 'open access' and 'traditional knowledge', and with a focus on the term 'user group' gradually coming about (Jodha 1991). In Southern Africa a special application of this body of work is found, namely Campfire (Murhpree 1993). A key organizational and intellectual locus for this body of work is the International Association for the Study of Common Property (IASCP).

Collective action, as a term and an analytical approach, is based on the insights achieved through the concern with and focus on property rights and commons, and represents a further applied development. One can perhaps venture to say that this concern aims at better integration of the theory and practice of common property NRM. Key analytical and applied terms are 'devolution', 'local management', 'local self-governance' and 'user group' (Mwangi and Patrick 2006; Nordvig Rasmussen and Meinzen-Dick 1995). A key intellectual

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6/ Cf. the dedicated LA site on the CBNRM Net website, at: www.cbnrm.net/resources/tools/la.html.

7/ The term 'local agreement' is translated from the French term '*convention locale*'. The French term '*code locale*' is also used. In English, the following terms are also used, more or less overlapping with the term 'local agreement' as used in this paper: 'code of conduct', 'customary land management agreement', 'local code', 'local convention', 'set-aside plan', and 'traditional village land-use regulation'.

and analytical focus for this body of work is CGIAR's System-wide Program on Collective Action and Property Rights (CAPRi).

Developments in the French / West Africa domain

Developments in this domain are restricted to the French language and, in geographic terms, to West Africa, primarily francophone West Africa.

The key operative term in French is *gestion des terroirs*. Far from easy to translate into English, this term exemplifies the problem of communicating between English and French when it comes to development work in general, and, perhaps, NRM in particular. In a narrow sense, *gestion des terroirs* can perhaps best be translated as "natural resource management", again understood in a more or less narrow way. In a broader sense, it should be translated as "village land management".[8/] From simply a term, in the 1980s it developed into an approach which aimed to encourage the development of rural villages through participation and capacity-building activities. A new generation of projects was implemented across West Africa that aimed to address problems with earlier investment and production oriented projects. It is a broadly focused approach that combines participation (*animation*) with soil and water conservation of local areas (*terroirs*) and social development. A key focus is to encourage creation of representative village associations that can be involved in negotiating local regulations relating to use of natural resources, with the aim of transferring control, management and use over to the villages. It is recognized as a serious problem that formal legal rights or titles were not transferred in this process (IIED 2000).

In a further step, beginning around the mid-1990s, and in order to address the above specific problem, a concern with addressing not individual villages but the supra-village level began, a move that in turn led to the approach of LAs. Developments in the English / Western domain as outlined above were noted, evaluated and incorporated (e.g., Bayer and Waters-Bayer 2002, Waters-Bayer and Bayer 1994).

The approach of LAs, including its evolution, is presented in Kirsch-Jung and Gensler (2003) and Kirsch-Jung and Sulser (2000). Specific documentation on the evolution of the approach in Burkina Faso is available in Dorlöchter-Sulser et al (2001).

Local agreements: context, definition and use

A key aspect of the approach of LAs – as with, for example, collective action – is decentralization, that is, some form of transfer of decision-making and/or executive powers to stakeholders outside the central state administration and/or down to regional or local levels.[9/] Two specific instances of decentralization are of key interest here: (1) *delegation*, which involves establishing local branches of central government departments in order to provide local services, but does not involve the transfer of decision-making power and (2) *devolution*, which amounts to more or less complete transfer of decision-making from higher to lower levels of jurisdiction.[10/] Most systems of local government, including in Africa, represent hybrids of delegation and devolution. Ensuring effective democratic representation, governance and transparency in the case of decentralized modes of governing and decision-

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8/ The term 'village' is used here instead of the perhaps more correct and/or more commonly used term 'community', in order to avoid confusion with the administrative sub-division "commune" in Mauritania (cf. Footnote 21).

9/ This section is based on: Harmata (2004), Kirsch-Jung (2002, 2003a, 2003b), Kirsch-Jung and Banzhaf (2005), Kirsch-Jung and Gensler (2003), Kirsch-Jung and Sulser (2000) and Mwangi and Dohrn (2006).

10/ Given the concern in the paper with the differences between Anglophone and Francophone scientific discourses, a note on use of these terms in the two languages is in order. In English, 'devolution' is understood as a specific form of 'decentralization', while, in French, 'decentralization' corresponds to 'devolution' (IEED 2000).

making is critical. The increasing call for making LAs for NRM is one response to this, in that devolution of decision-making powers is necessary both to properly protect natural resources as well as to achieve efficiency in local-level governing.

Following Haramata (2004:10), a LA is here defined as:

> "… [A] set of regulations drawn up in a participatory manner by as many stakeholders as possible, in order to promote equitable and sustainable natural resource management. It aims to bring together divergent interests and overcome the danger of one of other group's interest dominating to the exclusion of others, in particular vulnerable groups such as transhumant herders and outsiders. It involves three key elements:
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> 1. *Legality*. Local Agreements must fit within the framework of existing laws and regulations,
> 2. *Legitimacy*. Local Agreements initiated by communities themselves are most likely to succeed, and
> 3. *Profitability*. Commitment to Local Agreements depends largely on their ability to provide benefits for the community, ideally for all interest groups … ."

According to Haramata (2004), the essence of a LA is a combination of enforceable rules, negotiated agreements and management processes. The agreements may be written or verbal. Furthermore, they may be the result of village discussions or external influences, for example in connection with development interventions, work of NGOs, or initiatives by the local administration. Finally, the scope of the agreements may be broad, applying to all or to specific resources, and regulate the activities of whole villages or individuals. A LA is typically prepared following a number of steps:

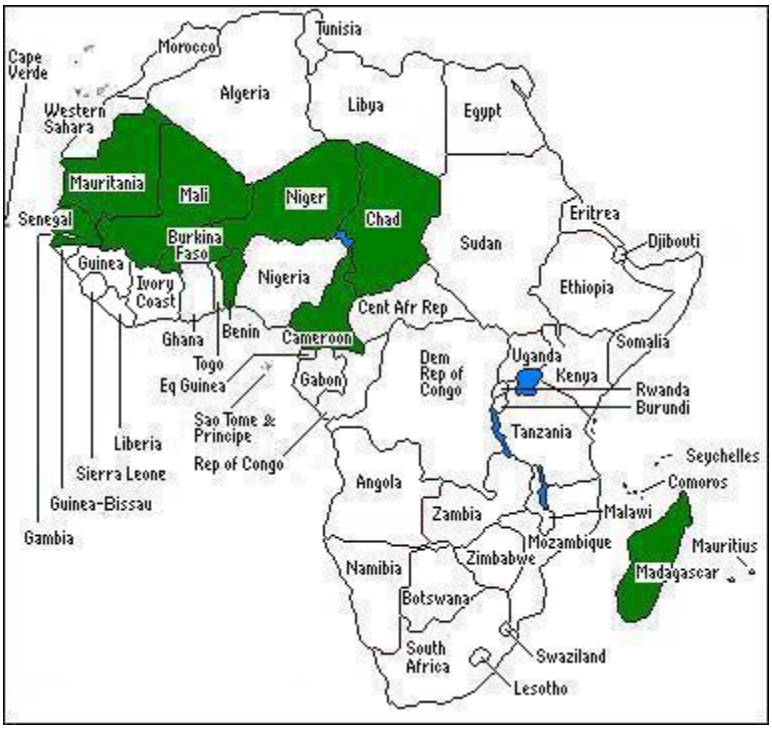
1. Expressing demand,
2. Raising local awareness through village dialogue,
3. Negotiating rules and compromises,
4. Drawing up consensus-based NRM rules and measures,
5. Setting up an organization to provide support,
6. Supplementary investment and activities,
7. Setting up a platform for multi-stakeholder participation,
8. Monitoring and evaluation mechanisms, and
9. System for replication and influencing NRM policy.

A key donor involved in developing and implementing this approach is the German Technical Cooperation Agency (GTZ). Since the first efforts at making LAs began (Dorlöchter-Sulser et al 2001; Hilthorst and Coulibaly 1998), a large number have been concluded, or are currently being negotiated, in the following countries: Benin, Burkina Faso, Cameroon, Chad, Mali, Mauritania, Niger and Sénégal (see Map 1). By 2002, more than 150 LAs were established in GTZ-supported projects in these countries (Kirsch-Jung 2003a).[11/] In addition to these on-the-ground activities GTZ has been involved in policy-level work in Madagascar, in the Ministry of Forestry, on legislation which enables similar local

[11/] Annex 1 contains an overview of projects on LAs concluded in GTZ-supported projects in Africa.

management systems (Republique du Madagascar 2000). A few donors, among them GEF, have begun implementing the approach in Burkina Faso, Chad, Guinea, Mali and Sénégal.[12/]

Map 1 – Africa: Countries where GTZ has been or is involved in work on local agreements



Source: Kirsch-Jung (2003a).
Note: Annex 1 contains an overview of GTZ-supported projects with local LAs concluded in these counties.

LOCAL AGREEMENTS IN MAURITANIA

To understand and appreciate the specific characteristics, function and goals with implementing LAs in Mauritania, some background is necessary.[13/]

Changes in land use, increase of incidents of conflict

Over the last 25 years the isohyet for 400-millimeter precipitation has moved approximately 40 kilometer southwards in the Sahel. This is partly responsible for the increase in desertification in the east of Mauritania (see Map 2). As a consequence rainfed agriculture is no longer possible in many places. New land for cultivation is only marginally productive (Cleaver and Schreiber 1995). However, local farmers, encouraged by the Government and donors, continue to plant north of this benchmark isohyet. At the same time pastoralists, generally *Moors*,[14/] have descended south, following the rain, and now graze their animals in areas where they have not been in 30 years, creating a new ethnic mix. Pastoral grazing areas further south for use during transhumance have been appropriated and are shut off to itinerant

[12/] Little knowledge about the work of other donors in this area is available, specifically in the case of projects implemented in Anglophone countries. However, it appears that USAID may be implementing a similar approach in Guinea.

[13/] The following background is adapted from World Bank (2004).

[14/] *Moor*, primarily of Arab-Berber descent, is by far the largest ethnic group in the country. The remaining population consist of around 5-6 minority groups (demographically as well as in other respects) of black African descent.

pastoralists.[15/] This creates conflicts between pastoralists and agriculturalists as well as among pastoralists.

Map 2 – Mauritania: Map of the country

Source: Famine Early Warning Systems Network, www.fews.net

Mauritania's traditional social organization has undergone drastic changes over the last 25 years. In sub-Saharan Africa, the rapid increase in population in many countries places too large a burden on traditional systems of land ownership. The population has doubled, pastoral areas are unable to absorb this increased strain on their already meager resources, and the increasing desertification is also an important factor. As a result, large numbers of the rural population have migrated to urban areas, notably Nouakchott.

[15/] The form of pastoralism found in these areas can be characterized as transhumance, specifically nomadic transhumance.

The Government program in support of the rural population emphasizes irrigated agriculture, which accordingly receives most funding. Rainfed agriculture ranks a distant second. Livestock has received veterinarian services in the recent past, but, even though considered an important sector in the overall drive for poverty reduction, has not received much support. There are also problems caused by large herds owned by wealthy individuals with government influence. These people ignore customary rules and do not consult with local people before using grazing areas.

The rural economy: Livestock, an undervalued asset

The livestock sector is probably the largest employer in the country. Mauritania has more than 4 million UBT.[16/] At least one herder is required for every 70 UBT. This implies that at least 57,000 herders are employed for 24 hours year-round. Taking into account peripheral activities such as construction and maintenance of wells and drawing water and selling it, means that the number of employed increases even more.[17/] At the same time raising livestock represents core values of Mauritanian culture. Its demise would have a profound negative impact for the society, beyond mere economic loss.

Yet the Mauritanian government neglects the sector. There are several possible explanations for this lack of governmental support: (1) Ruling Mauritanians come from a livestock background, believe they know the field, and see no reason to change current methods,[18/] (2) The last century has ingrained the idea of pastoralism as an outdated, inefficient system detrimental to the environment, (3) Donor initiatives attempting to substitute ranching over the last 25 years have failed and no one is willing to invest in the sector and (4) There is an enormous conceptual gap regarding what to do about pastoralism. After fifty years of lack of attention and assistance to the sector, there are few institutions with the capacity to safeguard, develop and modernize pastoralism. In the late 1990s, however, a regional initiative across the Sahel adapted training models for herders.

Despite little or no government support, pastoralism remains Mauritania's only viable sector in the rural areas. Whereas the statistical evidence for agricultural production in irrigated agriculture is precise, it becomes less reliable in the case of rainfed agriculture, and amounts to only estimates for pastoralism. There is also nearly nothing known about the distribution of livestock. Therefore, comparisons are difficult to make. Anecdotal evidence, however, seems to indicate that the overall value invested in livestock is about double the value of all crops. The economic assessment of the value of the livestock is rendered more difficult by two characteristics of this sub-sector: (1) The extent of the trade in camels, cows, sheep and goats across the international borders is unknown and (2) Herds are sometimes kept for purposes of status only, and not for economic reasons.

Traditional knowledge: Under-appreciated in modern legislation

The Mauritanian legal system is the result of three distinct sources of law which overlap and are not always coherent: (1) Traditional customary rules and regulations, (2) the *Sharia*

16/ 1 Unité Bétail Tropical / Unité Bovin Tropical (UBT) is equivalent to an animal of 250 kg live weight on maintenance. This term, which occurs in the French literature, corresponds to the English terms Tropical Livestock Unit (TLU) and Livestock Standard Unit (LSU). 1 UBT is approximately equivalent to 1.4 cattle or to 10 sheep or goats.

17/ Thomas Sommerhalter, personal communication.

18/ While there clearly is a strong conservative element that works against change, there are also important economic reasons why change is not necessarily considered advantageous. For example, the livestock sector is the only sector in the country that is not taxed, that is, there is no animal head tax in connection with exportation. This is widely understood as an important subsidy to the sector.

Islamic law system[19/] and (3) The French civil law system. All three sources of law coexist, but neither is professionally implemented. This legal pluralism creates uncertainty as to how property rights will be determined, and this can result in decreased tenure security (Meinzen-Dick and Pradhan 2002). It furthermore leads to a general disrespect of legal rules and of the *Kadi* and the judiciary, and it fosters corruption (judgment shopping).[20/] Since 1968 Mauritania has tried to harmonize the civil law with the Islamic legal rules. In the last decade, this work was assisted by World Bank funding. Despite considerable efforts, however, it has not yet led to any tangible results in practice.

A credible and effective legal system, which guarantees social peace, and is the foundation of any society, depends on the voluntary adherence of the citizens. The citizens will only respect a legal system that reflects their values. It follows that legal reform, which is needed in Mauritania in view of the fast-changing society from a tribal context towards the modern state, will have to build on the traditional values that are shared by the majority.

In order to facilitate necessary legal reform in Mauritania, these local values first have to be recognized, defined and evaluated. This work has, so far, not been done. It can only be done with active participation of the population, through an articulation of their traditional system of governance.

Natural resource management, conflicts and governance

The broader context for NRM and conflict management lies with the rule of the state and the quality of governance. The resolution of conflicts is closely linked to development strategies and management of natural resources, and peace and stability are understood to be necessary preconditions for development. Whether on the local or the regional level, conflicts in Africa represent a serious problem.[21/]

Due to the declining attention to traditional values in Mauritania, together with the diminishing authority of the tribal hierarchic structure, there is an increase in destructive environmental behavior. The modern administration cannot curtail such misuse, because of competing interests and lack of oversight. Existing conflict avoidance or conflict solving institutions are discredited. Rural villages elected to administrate property have no legal power to deal with issues of NRM. A new approach is clearly required.

Natural resource management and poverty reduction

Documentation of land ownership and land use will aid in the alleviation of poverty. Secure tenure encourages users to manage natural resources in a sustainable way. It builds confidence and thereby fosters investment, such as planting of trees for future use, for example, as charcoal. Secure property rights will also promote efficient management of common property resources. People often fail to adopt technologies for NRM because of a lack of secure property rights and a lack of collective action (McCulloch, Meinzen-Dick and Hazell 1998). Additionally, the creation of registries allows the poor to formalize their ownership rights and interests and thereby create legal ‘assets’. Formalized ownership rights

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19/ The *Sharia* consists of four to six schools (there are differences of opinion concerning the exact number). Most are Sunni, including *Malaki*, which is dominant in most parts of Africa, including in Mauritania. The *Malaki* school is based almost entirely on traditions and practices as found in Media around the 8th and 9th century, and appears to be fairly conservative (Maulana Muhammad Ali 1950).

20/ *Kadi* (also *qadi* or *qazi*) is a judge ruling in according with the *sharia*, the Islamic religious law. As a distinction between religious and secular domains is not recognized in Islam, *kadis* traditionally have jurisdiction over all legal matters involving Muslims.

21/ According to the World Bank, annually around 2 percent of per capita GDP in Africa is lost due to conflicts.

and interests will reduce social and economic inequalities among those with and those without use and access rights.

Issues

The key issues faced by Mauritanian agricultural and rural economic systems are:

1. The accelerating rural-to-urban migration,
2. Pastoralism provides high returns and is the only feasible form of land use in large areas of the country, yet receives a low priority from the government compared with rainfed and irrigated agriculture,
3. Increasing occurrences of desertification, intentional drainage of wetlands and deterioration of marginal areas,
4. Demographic pressure leads to unsustainable land-use activities and in- and out-migration,
5. Traditional communal property rights' systems are in flux,
6. Traditional institutions for mediating conflicts over natural resources, within and across ethnic groups, and between traditional institutions and the administration, have been weakened to the point where they are no longer effective,
7. Legislation is ill adapted to the local situation,
8. Lack of genuine representation of marginalized groups,
9. An increasing concentration of wealth in the hands of a few, and
10. Lack of decentralized decision-making power in NRM.

Relevant past and present interventions

The World Bank has been involved in the pastoral sector in Mauritania since the late 1980s. The projects supported include the First and the Second Livestock Projects, and the Rainfed Natural Resource Management Project (RNRMP/PGRMP). A follow-on project, the Community-Based Rural Development Project (CBRDP/PDRC), began implementation in 2004, while the research-cum-action project Technology Fosters Tradition (TFT) began implementation in 2004.

GTZ has been active in the rural areas in Mauritania – especially in *wilaya* Hodh-el-Chargui and *wilaya* Hodh-el-Gharbi in eastern and southeastern Mauritania[22/] – for many years, and GTZ's track record and accumulated experience is of special importance when it comes to the approach of Las. The relevant GTZ projects are Projet Gestion Intégrée des Ressources Naturelles de l'Est Mauritanien (GIRNEM, closed 2004), and Gestion Locale Collective des Ressources Naturelles au Guidimakha (GLC, 2000-2004), which became part of Programme de Gestion des Ressources Naturelles (ProGRN, started 2005).

Law and natural resources

According to national law, the tribes, and with it the traditional tribal system of managing natural resources, have been abolished. All natural resource in the country are now owned by

[22/] Mauritania consists of 12 *wilayas*, an Arabic word denoting an administrative subdivision, usually understood to mean 'province' but in Mauritania often translated as 'region'. The *wilaya* consists of *moughataas* (French: 'Departement' ['Prefecture' is sometimes used]. The *moughataa* consists of '*Communes*' ['municipalité' is also used] (rural municipalities), which is the lowest administrative level. Under the '*Commune*' are villages. On administrative positions on the levels of *wilaya* and the *moughataa*, cf. Footnotes 28 and 31.

the State, which, in turns, grants the right of all Mauritanians to utilize all natural resources anywhere in the country. This situation *de facto* amounts to what can only be labeled as state-sanctioned open access, and in the dry land savannah and wetland areas in the south and southeast of the country the results are being felt.

New legislation that addresses this was obviously needed, and the *Code Pastoral en Mauritanie* (*Code Pastoral*) may prove to be a pivotal piece of legislation, partly in itself, but largely because of the possibilities it has opened when it comes to preparing LAs. The Code Pastoral became a law in 2000 (Loi n° 2000-044), and the decree came in 2004 (Decret n° 2000-024) (Republique Islamique de Mauritanie 2000, 2004).[23/]

The *Code Pastoral* was initiated by a Mauritanian pastoral organization. Staff on GTZ's GIRNEM project, together with GTZ advisors in the Ministry of Rural Development, was instrumental in the process that led to the *Code Pastoral*, supported the initiative, and facilitated interaction of Mauritanian and GTZ expertise in a consultation and decision-making process. It was discussed at length with the local population and Islamic scholars. It is a good example for lawmaking in several ways: (1) Its language follows a natural flow, and is immediately understood and (2) The objectives pursued and the values protected are spelt out in the first paragraphs. The entire law is short and explicitly embodies both traditional and *Sharia* regulations (Wabnitz n.d. 2006). A conflict resolution mechanism built into the law provides for the official judiciary only as the third and last resort (the parties to the conflict, supported by their respective elders, constitute the first level; in case of persisting conflict they revert to mediation with the help of local representatives of the administration). The law may be considered a model to be used for reforming the other legislation pertaining to the environment.

The *Code Pastoral* develops a particularly important instrument in support of decentralization of NRM involving villages (Republique Islamique de Mauritanie 2004):

Article 17

"Local agreements are to be made between directly concerned users, by the relevant administrative authorities at the municipal level.

(Les conventions locales font foi entre utilisateurs directs devant les institutions municipales et administratives.)

Article 18

"The administration must support the establishment of local agreements and/or arrangements through dialogue with the relevant groups. In the absence of such local agreements between the direct users of grazing resources, the administrative authority can prohibit: (1) Any agricultural activity which can limit the access to grazing resources and (2) Any activity connected with pastoral camps or the movement of herds in important agricultural areas during specific periods of the year. The relevant administrative authority can also prohibit activities connected with camps or herding near agricultural areas in the period in between sowing and harvesting.

(L'administration doit favoriser l'émergence des conventions locales et ou arrangements au moyen de concertations avec les groupes concernés. En l'absence de ces conventions entre utilisateurs directs des ressources pastorales, l'authorité administrative peut interdire : (1) tout aménagement agricole pouvant limiter l'accès aux ressources pastorales, (2) toute installation

[23/] The general relationship between the law (loi) and the decree (decret) is as follows: the law, which is enacted first, is general in content, while the decree that follows it contains specifications and details, and pertains to the enforcement of the law. The *Code Pastoral* decree, which is of most concern here, contains five chapters: (i) definitions (Articles 1-3), (ii) general provisions (Articles 4-14), (iii) management of rural areas (Articles 15-27), (iv) pastoral organizations (Article 28), and (v) pastoral litigation (Articles 29-35). The Code Pastoral law and decree, in Arabic and French, are available online via the Global Legal Information Network (GLIN), at: www.glin.gov. The *Code Pastoral* law and decree have GLIN ID nos. 85725 and 158758, respectively.

de campements ou de troupeaux dans les zones agricoles sensibles pendant certaines périodes de l'année. L'authorité administrative compétente peut également interdire l'installation de campements ou de troupeaux à proximité des zones de cultures dans l'intervalle de temps situé entre la mise en culture et la récolte.)"

As has been hinted at, the World Bank and GTZ have continued where the *Code Pastoral* left of, so to speak, and are currently implementing projects in *wilayas* Guidimakha and Hodh-el-Gharbi, located in the south and southeast of the country, respectively (see Map 3). These projects, which, in the case of *wilaya* Hodh-el-Gharbi, are working in the same wetlands located south of the town of Aioun el Atrouss, the *wilaya's* administrative center, are:

- *World Bank, Technology Fosters Tradition (TFT)*. This project began in 2004, and focuses, as presently conceptualized, on research to document existing patterns of resource appropriation and use, using participatory GIS (PGIS), with the aim to provide data and insight to help prevent conflicts between the two main categories of users in these wetlands. Such data can, in turn, be used to prepare LAs. The TFT has been presented and discussed elsewhere (Soeftestad and Wabnitz 2004a, 2004b), and will not be addressed specifically here,[24/] and
- *GTZ, Programme Gestion des Ressources Naturelles (ProGRN)*. This project began implementation in 2005. This project is presented in the next section.

PROGRAMME DE GESTION DES RESSOURCES NATURELLES (ProGRN)

"Rural Development / Management of Natural Resources", one of the strategies jointly agreed upon by the Governments of Mauritania and Germany for development cooperation, is currently being implemented by the GTZ-supported *Programme de Gestion des Ressources Naturelles* (Natural resource management project, ProGRN).

As a consequence of ongoing social change – including: sedentarisation (by pastoralists), population growth, and an increasingly complex legal situation in terms of legal pluralism – the traditional tribal system responsible for management of key commons in the dry land savannah and wetland areas are increasingly becoming ineffective. Adaptation and changes in this system is not taking place, due to macro-level conditions in the legal and public sector framework, together with lack of an efficient incentive system at the local level. This, in turn, leads to the key problem, which is that local natural resources are being overexploited.

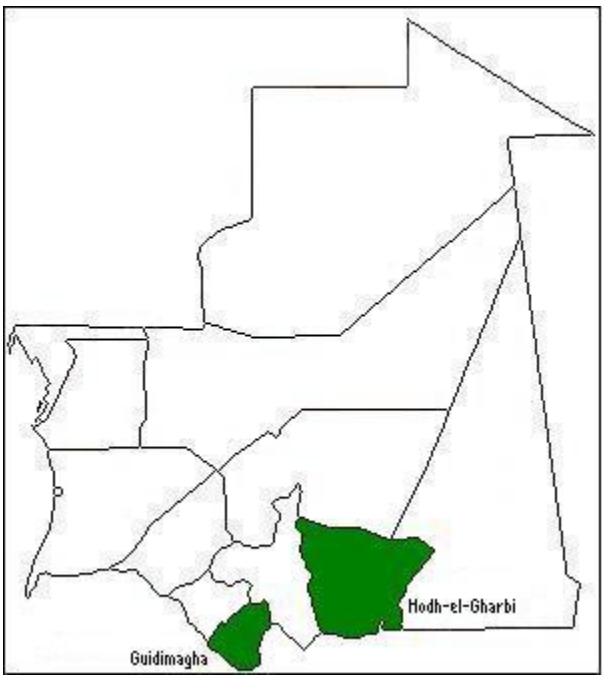
The overall goal of ProGRN is that: "the local population in selected areas become organized around managing key local natural resources sustainably". The project is highly relevant since it offers solutions to problems that correspond to or represent central concerns in the national policy when it comes to poverty reduction and management of natural resources. A significant feature of the program is that it links advice to the government at the policy level with decentralized long-term efforts at implementing this approach at the regional level in a way that is specifically suited to the situation in Mauritania.

Implementation began in *wilaya* Guidimakha in 2003 and in *wilaya* Hodh-el-Gharbi in 2005 (see Map 3). ProGRNs component II "Decentralized management of the natural resources in Guidimakha and Hodh-el-Gharbi" aims at negotiating, by 2007, at least ten LAs

[24/] Details on the work of TFT are available on the project's website at: www.cbnrm.net/web/tft.

in *wilaya* Guidimakha (covering more than 25 % of the area) and at least five LAs in *wilaya* Hodh-el-Gharbi. Given that work in *wilaya* Guidimakha has progressed most, below only activities in this *wilaya* are presented.

Map 3 – Mauritania: Location of *wilayas* Guidimakha and Hodh-el-Gharbi



The program operates at the local level, and with the private sector, government technical services, and professional organizations operating as intermediaries. These intermediaries are trained, advised and guided by national and international experts. The technical cooperation services include advice, training, material and equipment and financial support.

As one way of addressing the identified problems in local-level NRM, the cooperation between Mauritania and Germany has since several years focused on adapting the legal framework for NRM. As mentioned earlier, the *Code Pastoral*, which offers a crucial possibility for dialogue between local-level natural resource users at the level of the village, has provided a great opportunity for achieving results in this area. This work is continued through harmonizing environmental legislation (forestry and water codes) to enable local management.

Context of and stakes in decentralized management of natural resources

The recent dramatic increase in environmental degradation is alarming, and is caused by a number of factors related to, amongst others, social, land, organisational and legal factors. Likewise, climatic changes, especially in rainfall patterns, is often referred to as a key causal factor, but this is not certain. The increase in people's needs combines with loss of influence by the traditional institutions that formerly were responsible for control and management of natural resources. The latter has resulted in more or less free access to natural resources. The parallel implementation of various regulations by the State over the last fifty years has not managed to prevent or diminish this.

The State's legal framework for NRM has proved to be counter-productive, primarily by not making people aware of their responsibilities. Examples of the protection accorded by the Forestry Code to specific forest and fruit trees are often mentioned as proof of its success, while it is forgotten that these very species are part of larger local systems of production and ecosystems which does not receive the same attention. Faced with the fact of regulations that cannot be implemented or supervised properly, it is unavoidable that public sector inspectors resort to sell permits in order that they benefit personally. Such permits allow, amongst others: clearing land, clearing the undergrowth in the fields, cutting trees to produce charcoal, and cutting, among others, *Borassus* palms.[25/] In fact, this legal framework works against the traditional system of management based on principles and rules originating in customary and Islamic law, and contribute to the disappearance of traditional law through not supporting more responsible management initiatives. As a result, vast areas are currently experiencing irresponsible and disastrous activities that exploit forest, grazing and water resources. Without any doubt, this negative spiral of destruction will lead to a situation where the basic ecology of these dry land savannah and wetland areas cannot be renewed, and with it the economic potential farming and grazing will disappear.

The approach as implemented in wilaya Guidimakha

ProGRN is based on the aforementioned appropriateness of LAs to support concrete experiments in decentralized management of collectively managed natural resources. It is all about supporting managers of collectively managed resources as well as users of these resources in the identification and implementation of sustainable modes of management (that is, management rules and LAs). This relates to three key aspects of NRM: rights, organization and management:

- *Rights*. Responsibility for collective management is transferred from the State to local entities (NRM organizations) that are recognized and duly elected to manage local natural resources except agricultural lands,[26/]
- *Organization*. When these organizations are recognized, ProGRN advices and guides them in preparing a LA. The LA defines rules for NRM together with democratic methods for how to recover fees and managing the capital generated through utilization of the common property resources, and
- *Management*. Sustainable management of common property resources involves a concern with adaptive management. Advise and guidance regarding alternative ways of sustainable resource utilization or protection are provided, for example: tapping of juice from gum trees, building local fire walls, and maintaining areas for regeneration where grazing is temporally not allowed.

[25/] *Borassus*, or Palmyra palm, is a genus of palms. The species available in Mauritania is *Borassus aethiopium*, or African Palmyra palm. Palmyra palms are economically useful.

[26/] The approach of negotiating LAs covers all natural resources, including grazing areas and resources utilized by means of hunting and gathering, but with the exception of agricultural lands. The reason for not including agricultural lands is that property and use rights in agriculture are quite different in comparison with, for example, those found in grazing areas.

Table 1 – Stages in evolution of local organizations and preparation of local agreements

No.	Stage
1	*Identification*. An area that is suitable to inter-village local management is identified by representatives of the villages and the pastoralists that want to be involved in co-management. Official transcripts of the discussions are distributed to the participating stakeholders.
2	*Setting up*. A founding committee is established. Its composition is approved by the participating stakeholders: *moughataa*, *communes*, *wilaya* technical departments, and pastoral organizations.
3	*Recognition*. The management group is recognized as a legal entity. Its organization is recognized by the Ministry of the Interior, on the basis of prepared bylaws.
4	*Delimitation*. Locations where gathering of common property resources – e.g., trees as fodder, medicinal plants, *gum arabicum* and fire wood – will take place, are located and mapped, using available natural markers in order to avoid ambiguities. The outcome is approved by *communes* and villages.
5	*Assessment*. The area's ecology is inventoried using the Vegetation Cover Index (IVC), in order to establish a baseline. This is done jointly by the technical departments and the organization.
6	*Request*. The organization formally requests to be given responsibility for management. The decision (*arrêté*)[27/] regarding responsibility for management is submitted to the *Hakem*.[28/]
7	*Responsibility for management.* The responsibility for management is given to the organization provided an official LA is developed. The decision (*arrêté*) regarding responsibility for management is signed and handed to the organization.
8	*Codification*. A draft LA is prepared by the users, based on the application of existing regulations and practices. The draft LA lays down the main rules for management, together with access to the resources. It defines the methods for collecting authorized fees for utilization. Furthermore, it makes it possible for the organization to make gradual changes in operating procedures and practices as it gains experience in the areas of protection and resource regeneration.
9	*Transfer*. The responsibility for local management, in the form of the draft LA or a revised version of it, co-signed by the *Hakem* and representatives of relevant ministries, is handed over to the organization.
10	*Ecological monitoring and assessment*. Stage 5 (Assessment) to be repeated annually in order to assess the impact of the LA and the performance of the organization. The views of the technical department are requested and fed into an ongoing analysis of impacts. The results of the IVC is compared with the baseline IVC, and furthermore related to the situation in an area without a LA, in order to provide information on annual variations in rainfall.
11	*Implementation*. The organization works on the basis of an annual plan. It implements a way to collect management costs. It works out plans and specific projects. It aims to devise innovative ways for management and valorization of resources, and it sets up a mechanism for monitoring the application and effectiveness of the rules.
12	*Weaning*. The organization covers its management costs and negotiates financing of its projects. The local resource management is financed by an system based on equitable contributions, and which takes into account the amount of resources that each user withdraws from the management area.

This approach of supporting decentralized management of common property resources uses the legal innovation of LAs, and attempts to adhere rigorously to five main principles:

1. *Management of common property resources.* The approach is concerned with common property resources which are clearly delimited by an agreement between the users, made in the presence of the administration,

[27/] The legal term 'arrêté' does not appear to have a recognized translation in English. While 'arrêté', in the French legal system, is different from 'decret' (on 'decret', cf. Footnote 21), both are commonly translated into English as 'decree' ('decret de loi' = 'decree' and 'arrêté' = 'prefectorial decree'. The difference between 'arrêté' and 'decret' lies in the administrative levels at which they occur. In this paper, 'arrêté' is translated as 'decision'.

[28/] The *Hakem* (French: *Prefét*) is the Administrator of a *moughataa*. On the administration at the *wilaya* level, cf. Footnote 31. On Mauritania's administrative structure, cf. Footnote 22.

2. *Responsibility to be given to one management unit in each area.* This organization, which is located at the supra-village level, must show that it is inclusive and representative of all users. Towards this it is legitimated and recognized by the administration and the villages, with the possibility of raising complaints and suspension in the event of obvious cases of improper management,

3. *Equity in utilization of resources*. Users pay an admission fee which depends on the number of livestock that is grazing. The payments for utilization and use, which must be equal for all and means that users take responsibility for covering the management costs, are defined by the organization,

4. *The principle of subsidiarity*. The State and the villages are the key stakeholders involved in the transfer of responsibility for management of common property resources to the local level.[29/] In so doing, they relinquish involvement in decision-making and instead take on a monitoring role, as in the case of levying taxes on the production from the area under an LA, and

5. *Monitoring of the effectiveness of local management*. A tool, IVC, that monitors, on an annual basis, changes in the vegetation cover is utilized. It is used in connection with participatory evaluation of how the mandate for management is executed by the administration, specifically the Regional Delegations of relevant ministries at the *wilaya* level, including the Ministries of Rural Development, Environment and Water Resources.

The process consists of twelve successive stages that lead to the effective transfer of the responsibility for management of the area in question to an "Organization for common local management of natural resources" that represents the users of the area (see Table 1).

A decision (*arrêté*) formalizes the transfer of the responsibility for management, while the ownership continues to be public domain and reside with the State. The actual transfer of responsibility for management becomes effective only after the preparation and recognition of a LA, in which the methods and rules of management adopted by the new managers are clarified.

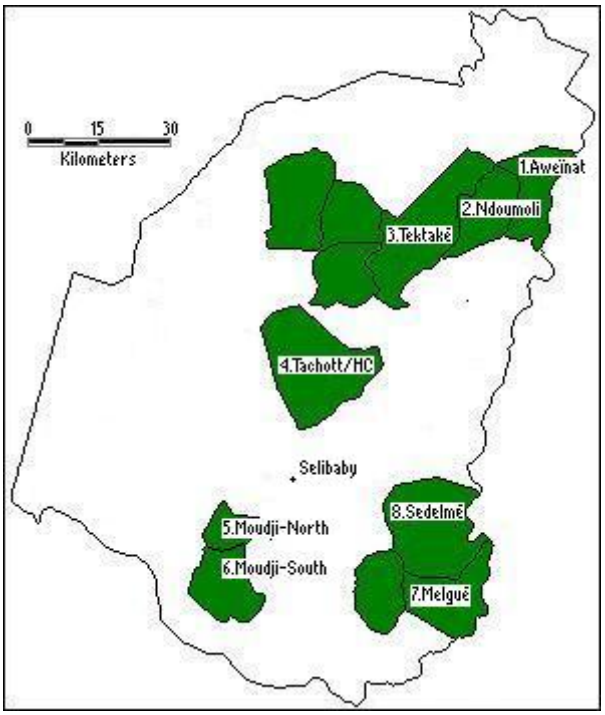
The organization keeps the exclusive right of common property resource management as long as it guarantees the continued sustainability of the resources (to be monitored through changes in the vegetation cover), as well as the degree to which the various groups of users are involved in the management. The responsibility for resource management can be withdrawn in cases of continued resource degradation, except in cases where variations in rainfall are causing such degradation, or if special changes in management practices have been duly announced and accepted.

In *wilaya* Guidimakha six LAs were concluded in the period 2004-05, while two LAs are reaching the stage of formal signing, and preparatory work on another four are ongoing (see Map 4).[30/]

[29/] The principle of subsidiarity, as used in governing and political science, states that central authorities should have a subsidiary function, performing only tasks that cannot be performed more effectively at a lower level.

[30/] Work in one area, Taghadé (not included on Map 4), has been halted.

Map 4 – *Wilaya* Guidimakha: Progress in preparing local agreements (April 2006)



Source: Adapted from a map prepared by project ProGRN.
Notes: (1) Areas where LAs have been established, and areas where LAs are presently under negotiation, are listed by name and number, and are presented in more detail elsewhere (cf. Table 2), (2) Cf. also Annex 1, (3) Some areas where work is less advanced are also included.

Details about the six LAs that are concluded, as well as two LAs that have reached the state of formal signing, are available (see Table 2).

Table 2 – *Wilaya* Guidimakha: Details on established local agreements and local agreements under negotiation (April 2006)

No.	Variables	1	2	3	4	5	6	7	8
01	Receipt of recognition of organization (Table 1, stage 3)	+	+	+	+	+	+	+	+
02	Allotment of area (Table 1, stage 7)	+	+	+	+	+	+	+	+
03	LA concluded and signed	+	+	+	+	+	+	-	-
04	Area (km2)	185	181	366	393	77	180	212	343
05	Vegetation Cover Index (IVC)	94	97	94	69	107	99	98	92
06	Number of inhabitants	2,280	1,695	4,515	11,224	900	4,080	3,768	7,286
07	Inhabitants / Km^2	12	9	12	29	12	23	18	21
08	Number of households	326	242	645	1,603	129	583	538	1,041
09	Members of the local organization	257	127	474	NA	38	NA	131	NA
10	Households / Members of local organizations	1.3	1.9	1.4	NA	3.4	NA	4.1	NA
11	Livestock, sedentary (UBT)	3,530	1,437	5,331	6,980	1,540	5,826	4,265	6,758
12	Livestock, mobile (UBT)	647	508	1,108	1,075	500	392	736	2,179
13	Livestock, mobile (% , of UBT total)	18	35	21	15	32	7	17	32
14	UBT / Households	13	8	10	5	16	11	9	9
15	Hectares / UBT	4	9	6	5	4	3	4	4

Source: Project ProGRN.
Notes: (1) The numbers in the column headings refer to the numbering of the areas in Map 4, (2) Average number of persons per household is 7 persons, (3) NA = data not yet available.

DISCUSSION

The approach tries out a special type of decentralized management of natural resources. It operates through a process of contract-based responsibilities for management and negotiation between involved local stakeholders (including: relevant authorities, groups of various users, *communes*, administration, and professional organizations). This process cannot succeed without an effective involvement of three key stakeholders: (1) Local people mobilized through local management organizations, (2) The administration, that is, the *Wali* and the *Hakem*[31/] and (3) The technical departments, that is, the Regional Delegations of the Ministries of Rural Development and Environment and their inspectors at the *moughataa* level.

Implementation began in *wilaya* Guidimakha, and went through decisive stages offered through the opportunity provided by the *Code Pastoral*. In particular, the key stage of the legal and institutional feasibility of setting up local management organizations was successfully achieved. These local organizations recognize and accept responsibility for common property resource management, and this responsibility involves, on a daily basis: (1) Transparent management of the finances, (2) Sustainable management of the resources and (3) Mediation of the multiple interests of the users.

At the present stage it is too early to do a thorough assessment of the approach. However, it is possible to extract a number of useful lessons at this point, aimed at developing the approach and implement it elsewhere in the country. The specificity of the approach stems from the way in which it rethinks responsibility for management of common property resources. While based on the hierarchy of rights of access to existing resources (that is, recognition of the prior rights as well as rights of third parties), the approach puts into place very strict conditions in the social and social organizational realm (that is, degree of representativeness of the various users) as well as in the environmental realm (that is, detailed ecological monitoring of the impacts of decentralized management).

Involvement and mobilization of villages

The overall process, as well as its various stages of setting up and recognizing local organizations for common property resource management, is guided by the views of local resources users, as encountered during the early phases of preparation, for example: “it is essential that the administration recognizes our right to manage natural resources”. Mobilization of interested people turned out to be easy at the various key stages: setting up the organizations, delimiting the degree of control over property of areas under consideration, and developing the first rules of management. The membership and social organizational functioning of the organizations show that existing loci for decision-making were heavily involved in the process (that is, village authorities, members of the *commune* councils and representatives of pastoralists). Requests for support for this approach have been voiced by several villages, and also by some villages that have testified in writing to the interest for this process of decentralization.

Development of management rules

After having addressed the multiple principles and traditional rules, the next step was the development of a format for LAs. Development of management rules is complex and requires guidance and training. It was a question of simplifying the process in order that it

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[31/] The *Wali* (English: Governor) is the government’s representative to a *wilaya*. On the administration at the *moughataa* level, cf. Footnote 28. On Mauritania’s administrative structure, cf. Footnote 22.

leads, within acceptable limits of time, to the first rules of general management. But it was also a question of facilitating the recognition of these LAs by the administration. Once these agreements are recognized, the organization is entitled to take on its responsibility for management. The second fundamental issue to be addressed is now encountered, namely that of organisational development. This involves the practical application of transparent rules for management of the financial resources generated by organization's work. Such a transparent approach to management guarantees that the managers will be accepted.

However, collection of fees to cover the cost of management, necessary to the viability of the organization, also necessecitates management. The introduction of the principle of fee-based right of access to resources, to cover what is taken out that goes beyond basic domestic needs, is nothing short of revolutionary. Organizations and the administration are committed to put into practice this principle within the framework of LAs. Implementation of this principle presupposes a lot of work, and involves dissemination of information and discussions with the various categories of users. The management of the organizations must work continually to increase the degree of support for the LAs, among the local population as well as among the temporary users (transhumant pastoralists, in particular).

Finally, an important task involves setting-up necessary management measures aimed at effective practices for regeneration of resources. To the extent that users accept these measures and conclude they are effective, it will be all the more easy to justify the financial contributions they are expected to pay. This is, in particular, true in the case of management of grazing areas were the organizations are getting involved very carefully, given the political and economic importance of sedentary as well as transhumant herding in *wilaya* Guidimakha.

Support by the administration and the technical departments

To successfully implement this approach a precondition is that the State is fully in support of the transfer of responsibility for NRM. The available legislation – in particular *Code Pastoral* – provides the opportunities for going ahead with implementing the approach. However, it is also a question of succeeding in imparting radical changes at the local level, in the relations between the administration in charge of controlling the utilization of resources, and the organized population which aspire to better resource management on which their survival depends, and often directly. At the present stage of implementation of the approach, the administration has played its part by being involved and by recognizing the first seven LAs negotiated by nine organizations supported by ProGRN. The *Hakems* have an essential role in supporting the process, because they constitute a crucial recourse in the event of conflict of interest or competences. They have also an important role to play, besides elected officials and organizations, in disseminating the approach and the advantages of LAs.

More problematic is the transformation of the functions and practices of the public sector inspectors in charge of monitoring natural resources. Here, nothing less than a "cultural revolution" will have to take place, involving a move away from the functions of policing and repression characterized by lack of transparency, over to functions of support, advice and monitoring of decentralized management. This presupposes specific support, including, obviously, crucial efforts at capacity-building of the human resources available at the local level. This is necessary in order to make sure that they are actually prepared for and able to take part in the process, and is a total break with the earlier accepted practices that were denounced by local users.

Rationales and motivations

It is relevant to ask what motivates local people to get organized and accept rules and regulations, which often implies having to accept reduced use of natural resources?

The socio-economic contribution of LAs has recently been analyzed using data from Benin, Burkina Faso, Chad and Sénégal, countries in which LAs have been operating for more than five years (Kirsch-Jung and Banzhaf 2005). Economic benefits in Chad and Sénégal include increase in firewood sale, gathered products including traditional medicinal plants, fishing, and in commercial outlets for construction wood. In Benin, revenues from sale of wildlife are important around the Parc National de la Pendjari. Ecological impacts include vegetation regeneration due to fire control, tree cutting and fallows. Increased availability of water in the dry season is a factor in Benin and Sénégal, while in Sénégal biodiversity enhancement in terms of the reappearance of rare plant species was noted. Soil regeneration due to erosion control and regulation of pastoralism were significant in Burkina Faso and Sénégal. Conflict prevention by means of resource management organizations was at the core of the social and economic impacts in Benin, Burkina Faso and Chad. The high cost of conflict resolution by engaging authorities was often given as the biggest incentive to negotiate LAs, resulting in prevention of conflicts and/or regulation of the cost involved. Institutional impacts include organizational development, the emergence of local development leaders, and a better understanding between the State and the local people.

Some concerns and questions

While it still is early to assess the approach, certainly when it comes to longer-term effects, work on analyzing this approach should continue. The recent evaluation is very useful, and should be followed by a broader-based evaluation soon, to include all projects, both closed and active ones (see Annex 1). Furthermore, a comparative evaluation of relevant activities implemented by other donors should be undertaken. Such broad analytical work would be needed in order to arrive at a general model for how to implement this approach, across countries and ecosystems. Some of the questions that arise from the present paper, and that may guide such future evaluations, include:

1. Is it correct to exclude agricultural land, although the traditional rights operating here are very different from in management of grazing areas?
2. With reference to West Africa, can something be done to facilitate exchange of knowledge and experiences between Anglophone and Francophone countries?
3. In addition to the recognized main two categories of local users, sedentarized pastoral people as well as transhumant pastoralists, there are also other itinerant users. How to involve them? Specifically, how to levy user fees on them?
4. There are two traditional categories of social organization and/or influence and power: Islam and tribes. How will these relate to the local organizations as they mature and gradually gain control and power? In particular, although the tribes and tribal structure is gradually dissolving and receding into the background, there are still powerful local tribal leaders on various levels to be reckoned with.
5. Conflicts are alluded to above. Dealing with conflict is often difficult to prepare for, and mostly a result of experiencing and addressing conflicts as and when they occur. This is bound to happen in the case of LAs, on different levels and between different stakeholders in the public sector and civil society, and between individuals as well as collectives. In particular, between pastoralists and sedentary people, and between local organizations and the public sector inspectors. Is this properly taken

care of? Are there any experiences so far with conflicts? If so, how can such experiences be analyzed in the context of a learning process and become part of revised plan of operation? And, finally, what are the most effective and optimal ways of addressing and adjudicating conflicts? The approach so far seems to rely on existing public sector office holders, specifically the *Hakem*. Will this suffice? Should additional capacity-building measures be considered?

6. The viability of the local organizations on the longer-term is of crucial concern. How to ensure their continued success and viability once the project moves on to another area, not to mention when it closes?

CONCLUSIONS

LAs constitute a very useful tool for local organizations that represent users to achieve official recognition to take over responsibility for sustainable management of natural resources. The detailed tasks and activities which they carry out is part of a process and a dialogue between users, as laid out in the *Code Pastoral*. This procedure for transfer of management responsibility to local organizations clearly is a response to high expectations oat the local level. The local organizations, upon having received management responsibility, very soon begin implementing their mandate to control and regulate access to the resources, in order to try to limit resource outtake and extraction, for example, mining (such activities are often integrated in an external private sector commercial network and do not benefit local people). Aside from these important considerations of a legal nature, local organizations and LAs must devise and implement practices that are aimed at a sustainable utilization, in order to balance exploitation and protection of the available natural resources.

Nevertheless, these agreements should not be understood as constituting fixed and rigid rules. The LA is a flexible tool and, moreover, one that can always become better, and, as a result of the experience gained in working with the LA, the local organizations will make progressive revisions and additions to the regulations and procedures in order to allow for a progressive adaptation of the convention. If the State and the relevant public sector have the will and intent to support this type of transfer of management responsibility, the result on the medium term should be a positive impact on both the quality and the quantity of natural resources.

These LAs thus constitute an important contribution to the Millennium Development Goals, in particular Goal no. 7 “Ensure environmental sustainability”.

Annex 1

Local agreements concluded in GTZ-supported projects in Africa

No.	Country	Project name	Project data
01	Benin	Programme National de Gestion des Terroirs et des Ressources Naturelles (PGTRN)	*Timeframe*: 1994-2004. *Ecosystem targeted*: six pilot sites located in all ecosystems in the country. *Local agreements negotiated*: 19 in the period 1999-2003.
02	Benin	Projet Autopromotion Villageoise dans les Communes Décentralisées de l'Atacora (PAVICO)	*Timeframe*: 1992-2993. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 2 in 1996.
03	Burkina Faso	Programme Sahel Burkinabè (PSB/GTZ)	*Timeframe*: 1992-2003. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 2 in 1999 and in 2003.
04	Burkina Faso	Projet Aménagement des Terroirs et de Conservation des Ressources dans le Plateau Central (PATECORE)	*Timeframe*: 1992-2004. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 1 in 1998.
05	Cameroon	Projet d'Appui à l'Autopromotion Rurale (PAAR)	*Timeframe*: 1996-2003. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 9 in the period 1999-2003.
06	Chad	Projet Conservation et Gestion des Ressources Naturelles dans le Mayo Kebbi (PCGRN)	*Timeframe*: 1994-2004. *Ecosystem targeted*: humid savannah. *Local agreements negotiated*: 18 in the period 1998-2003.
07	Mali	Programme d'Appui aux Collectivités Territoriales (PACT)	*Timeframe*: 2002-2010. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 4 in 2004, several under negotiation.
08	Mauritania	Projet Gestion Intégrée des Ressources Naturelles dans l'Est Mauritanien (GIRNEM)	*Timeframe*: 1994-2004. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: None. *Comment*: did important conceptual work on the *Code Pastoral* that is a precondition for LAs.
09	Mauritania	Programme Gestion des Ressources Naturelles (ProGRN)	*Timeframe*: 2003-2010. *Ecosystem targeted*: dry and humid savannah. *Local agreements negotiated*: 9 in the period 2004-2005, 6 under negotiation.
10	Niger	Projet Protection Integrée des Ressources Agro-Sylvo-Pastorales dans le Département de Tillaberi-Nord (PASP)	*Timeframe*: 1994-2003. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 5 in the period 1995-2000.
11	Niger	Projet Développement Rural de Tahoua (PDRT)	*Timeframe*: 1994-2003. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 5 in the period 1998-2002.
12	Sénégal	Projet d'Autopromotion et de Gestion des Ressources Naturelles au Sine-Saloum (PAGERNA)	*Timeframe*: 1994-2003. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 13 in the period 1999-2003.
13	Sénégal	Projet Sénégalo-Allemand Combustibles Domestiques (PSACD)	*Timeframe*: 1996-2008. *Ecosystem targeted*: dry savannah. *Local agreements negotiated*: 1 in 1999.
14	Sénégal	Projet Systèmes de Production Intégrés pour la Protection des Ressources Naturelles en Moyenne Casamance (PSPI)	*Timeframe*: 1996-2003. *Ecosystem targeted*: humid savannah. *Local agreements negotiated*: 9 in the period 1998-2000.

Sources: (1) Kirsch-Jung and Gensler (2003), (2) projects PACT, ProGRN and PSACD.
Notes: (1) Kirsch-Jung and Gensler (2003) covers LAs concluded by 2003 and for which documentation was available, (2) Information on LAs from 2004 and onwards are from the relevant projects PACT, ProGRN and PSACD, (3) As mentioned elsewhere in the paper, more than 150 LAs had been concluded in Africa in GTZ-supported projects by 2002, and in addition there are the LAs concluded by other donors.

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