

The Dryland Livestock Wildlife Environment Interface Project

Experiences and Lessons from
Livestock-Wildlife-Environment Interface
Management in Kenya and Burkina Faso





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Acronyms

ACC	African Conservation Centre
ADELE	Programme d'Appui au Développement Local dans l'Est
ALRMP	Arid Lands Resources Management Project
ASAL	Arid and Semi Arid Lands
AU/IBAR	African Union Inter-African Bureau for Animal Resources
AWF	African Wildlife Foundation
CAMPFIRE	Communal Area Management Programme
CBNRM	Community Based Natural Resources Management
DLWEIP	Dryland livestock wildlife environment interface
GEF	Global Environmental Facility
IUCN	International Union for Conservation of Nature
KWS	Kenya Wildlife Service
MECV	Ministère de l'Environnement et du Cadre de Vie (Burkina Faso)
NEMA	National Environment Management Authority (Kenya)
NRM	Natural Resources Management
RECOPA	Réseau de Communication sur le Pastoralisme (Burkina Faso)
TPN	Thematic Programme Network
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WWF	World Wide Fund for Nature
ZOVIC	Zone Villageoise d'Intervention Cynégétique



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Project Background

1.1 Introduction

Rationale and Relevance to Environmental Conventions

The AU-IBAR is a technical arm of the African Union with a mandate of enhancing the technical capacity of sustainable management of animal resources in the Member States and Regional Economic Communities for the improvement of human livelihoods and conservation of grazing land ecosystems. The management of livestock, wildlife and environment at the interface presents a challenging scenario in the integration of development and environmental conservation in Sub-Sahara Africa. Among the key issues are the increasing conflicts over natural resources resulting in increasing land degradation and loss of wildlife diversity and populations. DLWEIP was therefore initiated with the goal of documenting good practices on mainstreaming biodiversity in mixed production landscapes through the sustainable management of livestock and wildlife at the interface in pilot areas in Kenya and Burkina Faso. The project outcomes were intended for dissemination through UNCCD Thematic Programme Network (TPN 3) on the rational use of rangelands. The project sought to demonstrate that the mixed wildlife livestock based livelihood system is more sustainable than wildlife or livestock alone, thus promoting more sustainable pastoral and agro-pastoral livelihoods in sub Sahara African savanna ecosystems.

This project addresses one of the eligible activity within the GEF Operational Programme number 13 on “Conservation and Sustainable Use of Biological Diversity Important to Agriculture” and also strongly responds to the GEF Operational Program number 15 on “Sustainable Land Management” whose objective is to mitigate the causes and negative impacts of land degradation on the integrity of ecosystems while at the same time improving livelihoods and the economic wellbeing of the people. Both countries are signatories to the UNCCD and UNCBD. Kenya ratified the UNCBD on 26th July 1994 and UNCCD on 24th June 1997. Similarly, Burkina Faso ratified the UNCBD on 2nd September 1993 and the UNCCD on 6th January 1996. The two countries are therefore eligible for GEF support in addressing the biodiversity and land degradation focal areas.

An Overview of the Sub Sahara Savanna Ecosystem: Opportunities and Challenges of Livestock, Wildlife and Environment Interface Management

It is estimated that 43% of land area in Africa falls within the Savanna drylands, and that an estimated 45 % of the population or approximately 325 million people in Africa live in these areas. Among the major challenges facing communities in Sub Sahara Africa drylands are recurrent droughts leading to conditions of food insecurity. People living here are also faced with socio-economic, political and ecological factors that affect their livelihood diversification potential/interventions. Climate change is expected to increase the frequency of droughts in many parts of the world, especially Sub-Saharan Africa. Pastoralists and wildlife have harmoniously co-existed in African rangelands for many years. However, competition for scarce grazing and water resources is increasing, and the potential for conflicts between wildlife managers and livestock owners is growing as pastoralists and



agro-pastoralists move into new areas and/or live in the vicinity of protected areas. Conflicts between people and wildlife are therefore a daily occurrence as wildlife migrates from parks to surrounding areas, where animals, people, and livestock compete for resources.

The DLWEIP site in Burkina Faso represents typical West African conditions and while the Kenya sites represents the wildlife rich savannah ecosystems in East Africa. Drylands constitute about 80% of land in Kenya and 98% Burkina Faso. The project location in Burkina Faso is in the Arly region in the South East, which is part of a dryland system with transhumance and the largest elephant population remaining in West Africa. The fact that elephant survive here indicates that the remaining biodiversity is also reasonably intact and Arly forms part of a protected area complex that extends over three countries (Burkina Faso, Benin and Niger) and comprises a series of national parks, preserves and hunting areas. In Kenya, arid and semi arid lands support nearly half the livestock population of the country and over 30% of the total human population, and are home to most wildlife species.

Sustainable management of livestock and wildlife at the interface is seriously threatened by modification of agro-ecosystems in both countries. In Burkina Faso, the Fulani transhumance routes have been blocked by unplanned settlements while in Kenya, the livestock marketing routes have similarly been taken over by sedentary populations. The co-existence of livestock and wildlife in the savanna landscape is threatened by over-exploitation of natural resources due to increasing human populations and weakening of traditional institutions that control and regulate access to grazing resources and protection of wildlife. Loss of biological diversity in agro-ecosystem is also resulting in the loss of the cultural diversity of traditional communities and increased vulnerability to poverty and natural resource based conflicts. DLWEIP was addressing a complex problem of sustaining mixed production systems in Sub Sahara Savannah agro-ecosystems that are undergoing rapid changes due to modernization of agriculture and other emerging land use practices such as new approaches to natural resources conservation under community management (conservancies in Kenya and ZOVICs in Burkina Faso).

DLWEIP Design and Implementation Approach

The key stakeholders in livestock, wildlife and environment interface management were identified early in the PDF project design phase in 2004. Project design and planning were done during project sites, national and regional workshops in which all stakeholders were involved including the target communities, NGOs, private sector players and the various Government departments/institutions. DLWEIP effectively supported and encouraged partnership, consultation, and decision-making among all the project partners, institutions and target communities.. The target communities in Kenya also provided field coordination services needed by the DLWEIP implementing partners.. The duties of field assistants in Kenya were taken over by community leaders who worked closely with implementing partners in mobilizing and making arrangements for community participation in the implementation of DLWEIP activities. In return, the community leaders received a token allowance that should have been used to pay a project employee. The sustainability of local project-related structures and outcomes are closely linked to participation of key stakeholders who included Board of Trustees for conservancies, Group Ranch Management Committees, local government administration, and AWF as one of the key NGOs in the project area.



In Kenya, the implementing partners and collaborating institutions effectively participated in data collection workshops and in various facts finding consultations. The institutions willingly shared valuable data for baseline studies and willingly supported DLWEIP implementation. DLWEIP also facilitated the validation workshops that empowered target communities in Kenya to prioritize DLWEIP activities in line with their priorities. AWF field staff provided a lot of support and guidance to other implementing partners as well as sharing their vehicles with some partners during field study and supervision monitoring tours. AWF also linked the implementing partners to other institutions that would support their activities. Overall, DLWEIP partnership approach was effective in building strategic alliances among implementing partners institutions and local communities (project beneficiaries).

The DLWEIP added incremental benefit to the community-private sector partnership by training community game ranger scouts to provide security to wildlife habitats where eco-lodges are located. The project also financed the capacity building of community leaders and managers in the conservancies and also skills for entrepreneurship in income generating projects and the management of community based projects.

Lesson learnt

Participatory project identification and design process, where all key stakeholders are genuinely consulted and make their contributions at GEF project development phase was an indispensable stage that ensured project implementation, ownership and transparency and accountability. The project beneficiaries in both countries and particularly in Kenya were keen to monitor the implementation of project document at every stage. The GEF project development A phase is therefore a very critical stage for project formulation, implementation, evaluation and monitoring by the key stakeholders including the end beneficiaries.

1.2 The Savanna Ecosystem

The physical environment

The African Savanna biome is a tropical grassland between latitude 15° North and 30 degrees S and longitude 15 degrees W and 40° West. It covers several countries such as: Guinea, Sierra Leone, Liberia, Cote D'ivoire, Ghana, Togo, Benin, Burkina Faso, Nigeria, Cameroon, Central African Republic, Chad, Sudan, Ethiopia, Somalia, and the Democratic Republic of the Congo, Angola, Uganda, Rwanda, Burundi, Kenya, Tanzania, Malawi, Zambia, Zimbabwe, Mozambique, Botswana, and South Africa.

Rangeland production in the Sahel is highly seasonal. Rainfall is monomodal, falling mainly between June and October in the northern hemisphere and December to March in the southern hemisphere. Most of the shrubs and trees are deciduous but have longer leaf-production cycles than the herbaceous plants. Grazing during the growing season can significantly affect production in the same season and may affect long term productivity. This finding supports the continued practice of transhumance in the southern Sahel and nomadism in the northern Sahel to ensure maximum dispersion of livestock during the growing season. Soils in the savanna vary according to bedrock and edaphic conditions. In general, however, laterization is the dominant soil-forming process and low fertility oxisols can be expected. The project site in Kenya (greater ewaso Nyiro ecosystem receives an average of between 400 to 600 mm of annual rainfall that comes in two seasons (March to



April and October to November) while the Burkina site is much wetter with over 600 mm of rainfall received in one season only in a year.

The Biodiversity of savanna ecosystems

Dryland ecosystems support a wide variety of plants and animals. Crop species such as wheat, barley, sorghum, millet, and cotton have all originated from dryland ecosystems. Drylands support large numbers of wild herbivores that depend on the ecosystem for year-round habitat and share the land with domestic herds. In Addition, the world's greatest diversity (over 40 different species) of ungulates (hoofed mammals) is found on the savannas of Africa. The antelopes are especially diverse and including eland, impalas, gazelles, oryx, gerenuk, and kudu. Buffalo, wildebeest, plains zebra, rhinos, giraffes, elephants, and warthogs are among other herbivores of the African savanna. Up to sixteen grazing and browsing species may co-exist in the same area.. West Africa is home to 20 percent of all cattle and 30 percent of all sheep and goats in sub-Saharan Africa, and over half of the region's 175 million head of livestock are raised in arid/semi-arid rangelands and mixed cropping areas. The project site in Kenya is in the Ewaso Nyiro ecosystem, which has the largest number of wildlife outside protected areas and the largest number of elephants in Kenya.

Traditional human land use practices

The three main types of pastoral systems practiced in the arid and semiarid areas are nomadic/transhumant, sedentary livestock raising system and ranching. In the arid rangelands, productivity is constrained more by density-independent factors such as climatic variability and other external shocks to the system, than by density-dependent factors such as stocking rates and grazing pressure. In Kenya the project target population is now settled in their land and practices pastoralism within their communally owned land. By contrast, the project in Burkina Faso addressed diversified target communities of transhumance, farmers, foresters and sedentary herders. In Kenya, the attempt by pastoralists to migrate with livestock encounters barriers in the form of fences and extensive (private) farms/ranches. In Burkina Faso, the project sites include private wildlife concession areas.

The resilience of savanna ecosystem under various production systems

Considering that climate change projections indicate an increased frequency of climatic extreme events and a progressive decline in rainfall in drought-prone tropical regions, the issues of land degradation and eroding resilience in dryland agro-ecosystems become even more critical. This calls for an improved understanding of the complex responses that dryland agro-ecosystems show to internal as well as external changes Overall, the human activities have reduced the ecological resilience of the savanna ecosystems to support sustainable human livelihoods. The resilience of dryland ecosystem is undermined by non-sustainable natural resource exploitation, widespread environmental degradation, emergence of non-compatible land use systems and the influx of more people from high potential areas who practice inappropriate technologies for livelihood support e.g. clearing wetlands and riverine areas for cultivation.

The impact of climate variability and climate change has increased while the scarcity of natural resources has fueled human-wildlife and livestock conflicts and tribal acrimony. The practices and responses by the people to increased poverty and human conflicts



have resulted in non-sustainable land use practices, extreme poverty and a great threat to coexistence of wildlife and livestock in the dryland ecosystems. DLWEIP's intervention through best practices like supporting interface management approaches and catalyzing the rangeland rehabilitation and improvement initiatives through grass reseeding, grazing management, creation of drought reserve grazing areas within the conservancies and formulation of community grazing management plans provide an opportunity for the range to recover.

1.3 Problem Analysis

The overall goal of this UNEP/GEF project was to mainstream good practices of integrated management of biodiversity and livestock resources at the interface in mixed production agro-ecosystems for the improvement of community livelihoods, enhancement of biodiversity conservation and mitigation of dryland land degradation.

In the context of UNEP/GEF mandate, livestock wildlife environment interface management land use practice is relevant to the strategic priority on generation and dissemination of best practices for addressing current and emerging biodiversity issues (BD-4) in Savanna ecosystems especially in Sub-Sahara Africa. The problem of environmental degradation at the interface in savanna agro-ecosystems is linked to GEF Operational Programme (OP 15) on Sustainable Land Management. Land degradation in drylands is increasingly undermining good biodiversity conservation practices of especially livestock and wildlife under indigenous agricultural production systems. The savanna ecosystem covers about 60% of Africa and currently supports over 300 million people who are directly or indirectly dependent on sustainable use of the rich agro-biodiversity which includes most of the large mammal and avifauna biodiversity in the continent.

The challenges facing sustainable management of agro-biodiversity and promotion of good land management practices include increasing human population, adoption of poor land use practices that lead to loss of biodiversity and breakdown of savanna ecosystem functions and services. Consequently, the natural resource based livelihoods in Sub Sahara Africa have become more vulnerable to natural disasters such as droughts and floods and conflicts, leading to increasing levels of poverty and widespread land degradation and loss of biodiversity. The Dryland Livestock wildlife and environment interface project was conceived to address this challenge by identifying, supporting good practices in partnership and collaboration with other stakeholders and in particular the local communities.

Vulnerability of the pastoral and agropastoral communities is increasing, as the trends of natural resources are all downwards according to ACC assessment findings. As a result, poverty is on the increase, and the social networks (the way people live together) is being destabilised resulting in conflicts. At ecosystem level, the Ewaso Nyiro is under pressure from climatic variability as well as from human activities, which are undermining the ecosystem resilience. The pastoral production system is negatively constrained by inappropriate policy environment that does not promote sustainable livelihood strategies and livelihood outcomes. Consequently, poverty and land degradation, lack of alternative income generating opportunities continue to drive the process of worsening environmental degradation and vulnerability of the pastoral communities to natural and human made catastrophes (drought, conflicts, poverty and food insecurity).



Project Overview

2.1 Project formulation

The problem of mainstreaming biodiversity conservation in dryland agro-ecosystem was the subject of discussion by the AU-IBAR Livestock and Environment Interest Group of experts in Nairobi during project conception. The interest group included scientists from UNEP, University of Nairobi, ILRI, WWF, AWF, IUCN, and KWS under the guidance of AU-IBAR Director. It was during the various consultative and brainstorming sessions on the challenges of integrating wildlife and livestock management in dryland ecosystem that an application for PDF A was formulated to address this issue. In accordance with the provisions of the PDF A, DLWEIP was formulated in a participatory way where all key stakeholders including the target communities and Government Departments contributed their ideas on the most sustainable approach to interface management of wildlife and livestock in dryland agro-ecosystems. The project sought to identify operational good practices at the interface and to document them for dissemination of the knowledge and technologies to similar situations in the Savanna ecosystem

2.2 Implementation approach

Effective action in fighting land degradation requires cooperation and partnership at all levels in order to mobilize resources and technical support required to achieve long-term local and global benefits. The implementing partners of DWLEIP were the respective governments, AWF, IUCN, ACC, local NGOs and the community. The Implementation arrangement comprised:

- Project steering committee (Two meetings in April 2007 and April 2008)
- Project National Steering Committee in Burkina Faso established in March 2007 and quarterly meetings
- Project coordinator and field assistant in MECV, Burkina Faso
- No Project Coordinator in Kenya- the Community assisted during field work

DLWEIP actively involved its key partners (AWF, ACC, IUCN, ALRMP) in project implementation through assigning specific responsibilities. Direct facilitation of implementing partners who constituted the national steering committee created synergy and strong partnerships between Government Departments and the NGOs in Kenya. In Burkina Faso, national coordination of the project was through the Ministry of Environment, with project activities being implemented through RECOPA (an association of local pastoralist groups registered with the government) and the ADELE (a local NGO working with ZOVICs) which are legal entities. However, there were delays in project start up due to time taken to get all partners to decide and sign up implementation and coordination arrangements, an indication that future projects need to prioritize and address the issue as early as possible.



From the findings of the DLWEIP exit workshop held in February 2009, it is clear that partnerships and collaboration played a key role in the realization of DLWEIP outputs and outcomes and in upscaling of good practices in follow up initiatives by the implementing partners who have already or jointly leveraged additional funding from other donors. The process of legalizing land use zoning under conservancy management has drawn interest and tacit support from national focal ministries in both Kenya and Burkina Faso.

Lesson learnt

Team work of experts facilitated by one leading institution was critical in formulation of a complex project that addresses priority environmental issues that have both local and global benefits. The issue of livestock wildlife environment interface required a multi-sectoral approach from conception, design and implementation. This approach takes time and requires active participation of implementing partners and local communities at project sites. By adopting this approach, DLWEIP focused on the root causes of land degradation and biodiversity losses at the livestock wildlife and environment interface.

2.3 Project achievements and outcomes

The project targeted to realize three major outcomes namely:

- Biodiversity loss and land degradation minimized or reversed around livestock/wildlife interface areas at pilot sites;
- Community livelihoods improved and sustainable management of wildlife and livestock resources at the interface enhanced in Kenya and established in Burkina Faso; and
- Enhanced awareness of adaptable best practices on sustainable land use management at the interface, leading to scaling up of best practices in other African Drylands rich in wildlife

i Biodiversity loss and land degradation minimized or reversed around livestock/wildlife interface areas at pilot sites

The following were the key achievements:

- Over 150 Ha of degraded land was reseeded (Namunyak, Naibunga conservancies). The cost of rehabilitating one hectare was about US \$ 100 while the price of land in the same area was going at USD 135/ha.
- Natural resource management plans developed for three conservancies, namely, Namunyak, Kalama and Naibunga.
- Assistance provided for the development of group ranch constitutions, conservancy and group ranch bylaws and establishment of local mechanisms for enforcement (for Naibunga)
- Development of the capacity of the community to undertake sustainable land management through trainings conducted on land use planning and management of ranches and ZOVICS; also strengthening of community based monitoring for Naibunga, Kalama and Namunyak.



Range rehabilitation through the reseeded program has been very successful. The role of women in rehabilitation was particularly notable through their women group. In Naibunga conservancy, 60 bags of indigenous grass seed were harvested, averaging about 50kg per bag) and sold to other areas at a price of US \$ 4.7 per kg (KSh 350 per kg). Reseeding is being replicated at household level and the target community has pledged to mobilize their own resources to continue with the reseeded program.

Lesson learnt

The rehabilitation has turned out to be an income generating activity since several sedentary pastoralists in Conservancy areas in Kenya want to replicate this success story at household level. Definition of resource tenure under group ranch bylaws ensures that household investors will get total benefit. As long as the land rehabilitation can be shown to be an income generating activity, groups of individuals such as women groups and individual households will adopt the technology based on economic incentives. However, the investment needs protection under a national legal code.

ii Community livelihoods improved and sustainable management of wildlife and livestock resources at the interface enhanced in Kenya and established in Burkina Faso

The project targeted promotion of community conservation and land rehabilitation initiatives, community capacity building in various fronts and stimulation of income generating activities (alternative livelihoods) and some aspects of community conflict management and resolution initiatives. Key among the adopted strategies was the strengthening of the management team of conservancies in Kenya and ZOVICs in Burkina Faso to address the following issues:

Conflict resolution: In Burkina Faso, four thematic workshops were organized for pastoralists, farmers, breeders and forest producers respectively. Early indicators of impact revealed that there was reduction in the number of conflicts from 196 in 2004 to 15 in 2008. DLWEIP in partnership with RECOPA supported the RECOPA ongoing initiatives of securing access to transhumance routes and grazing areas in neighboring countries of Burkina Faso. Marking of transhumance routes have gained acceptance in Benin, Togo and Niger. DLWEIP facilitated the creation of awareness among the communities and governing authorities for securing transhumance routes for the overall welfare of the pastoralists. An early impact indicator showed that the income for pastoralists increased as a result of harmonious coexistence with sedentary farmers and improved livestock sales during the transhumance period. In Kenya, conflict resolution plans and mechanisms for conservancies were developed during trainings on governance which significantly resulted in the reduction of natural resource-based conflicts

Alternative livelihoods: The project catalyzed the initiation of livelihood enterprises in Kenya e.g. by providing 60 improved beehives and 80 chicken to a Women Group. In Burkina Faso, one Women group (28 members) was trained in business management and in milk processing and is in the process of setting up the enterprise. The groups in both countries received training in financial and enterprise management.



Conservation-based enterprises: operation of conservancies and ecotourism has provided employment opportunities where scouts and other community members work. The project provided communication equipment (radio) to the scouts.

Animal health and production: The project facilitated the establishment of disease control committee in Burkina Faso and in Kenya trainings included veterinary scouts on disease surveillance, livestock breeding, fodder conservation; and pasture and grazing management, and range rehabilitation. After proper training grazing committee members and grazing guards improved reporting of disease incidences to the Veterinary officers.

iii Enhanced awareness of adaptable best practices on sustainable land use management at the interface

DLWEIP's overall goal was to document and disseminate identified good practices and lessons learnt from project pilot sites to other member African countries with similar ecosystem challenges. So far, some lessons learnt from successful livestock wildlife interface management have been shared between Kenya and Burkina Faso. The achievements include:

- Policy briefs on natural resources, conflicts on natural resources, monitoring and evaluation, completed and posted on the AU/IBAR web for the wider audience.
- Inter-country and intra-country exchange visits to exchange ideas on best practices and share lessons

Learning through the exchange visits proved to be an effective catalyst for the communities in initiating land rehabilitation initiatives, and promoting livestock marketing through community-private sector partnership. For example, Namunyak conservancy sold 11 heads cattle to Ol-pajeta private ranch to restock their ranch. In Kenya, communities outside the project areas have opted to establish similar conservancies outside DLWEIP project areas after leadership training sessions which were attended by some leaders from outside the project area. The neighboring group ranches are replicating the conservancy idea. In addition to economic benefits that accrue from conservancies, the other benefits include improved human and livestock security through the courtesy of wildlife and grazing scouts who were provided with communication gadgets to report cases of illegal grazing, insecurity from livestock rustling and wildlife poaching.

Lesson learnt

Exchange visits and workshops provide an effective strategy for sharing and disseminating good practices at community/local level, national and international level. The exchange visits played a significant role in inspiring communities as observed in Kenya where communities demonstrated enthusiasm and have adopted the conservancy model and land rehabilitation following DLWEIP sponsored visits to other pastoral areas with good land management practices.



Sustainability of Project Outcomes in the Project Pilot Sites

The major challenge in introducing new development ideas under project framework is to create outcomes and impacts that will lead to improved environment and human livelihoods upon project termination. DLWEIP was focusing on the best land management practices that will improve agroecosystem sustainability with special reference to the biodiversity conservation and socio-economic and cultural dimensions at the interface. UNEP/GEF project sustainability criteria include financial, socio-cultural, institutional and governance, and enabling policy environment. The experiences and lessons learnt in tackling suitability criteria are highlighted in this section.

3.1 Ecological criteria

The rapid increase in the demand for ecotourism destinations and partnerships between communities and private investors has supported the ecological benefits from sustainable land management practices under conservancy model. Other Conservancy provisioning services include improved grazing resources which are leased to individual when appropriate, and bee keeping. The increase in area of rehabilitated lands by households in Kenya DLWEIP sites gives strong evidence that the communities are ready to sustain ecological benefits where the economic benefits are also realized; confirming that the poverty/ land degradation spiral is not irreversible. As sustainable management of wildlife resources at the interface becomes more profitable, communities will invest more in resource conservation. However, there is need to highlight the linkage between sustainability of ecosystem services and sustainable livelihood strategies

In Burkina Faso, Government land is leased to communities and private concessionaires for hunting. Community hunting land (ZOVIC) acts as a buffer zone between the community settlements and private concessions. The ZOVIC management committees are willing to lease their protected land to transhumance pastoralists at a fee while the farmers are also forging partnerships with transhumance pastoralists to benefit from livestock manures as livestock feed on crop aftermath. The communities are keen to forge partnerships with private concessionaires who are well placed to hire ZOVICs during hunting seasons. The private concessionaire benefits from the good community neighborliness, reduction in wildlife poaching and illegal grazing thus sustaining and enhancing ecological benefits as good land management practice.

The replication/expansion of DLWEIP good practices in Kenya is expected to include the dryland in Ewaso Nyiro Ecosystem under the Northern Rangeland Trust, an area that covers 1.5 million ha. In Burkina Faso the outscaling is expected to cover the Arly National Park (119,500 ha) and its adjacent areas under agro-pastoral production.



Lesson

The communities are willing to lease their land if the legal and institutional enabling environment exists. In Kenya where resource and land tenure are clearly defined in the project site, the communities are entering in partnership with the private sector who are willing to pay for the environmental services accruing from community managed protected areas. However, it is important to ensure that there is linkage between economic benefits and the corresponding ecological services. The payment of these services to the community however has to be reasonable enough to compensate for alternative activities which are less friendly to adoption of good land management practices

3.2 Socio-cultural criteria

Although in the short run sustainability of conservancy benefits seems promising, there is a looming risk that the improved islands of grazing resources may be a source of conflicts. Stakeholders and particularly the relevant government departments and NGOs need to strengthen and support the local peace and conflict management structures which were revitalized by DLWEIP and implementing partners. In the recent DLWEIP exit strategy this need was recognized as a feasible strategy by the stakeholders for supporting the local peace-building structures. These local structures provide a platform for enhancing dialogue and negotiations for shared natural resources (grazing, wildlife and water resources). The Northern Rangeland Trust platform whose membership includes local communities, group ranches and private conservancies and commercial ranches in the Greater Ewaso Nyiro Ecosystem in Kenya may probably provide the best strategy for mitigating potential intra-tribal and inter-tribal conflicts.

The local peace structures/conflict management committees, established and supported by the Government in both Kenya and Burkina Faso, are critical for sustainable establishment of socio-political environment that supports the likelihood of better ownership of project outcomes and benefits by key stakeholders, particularly the local communities.

3.3 Governance and institutional arrangements

The Community Based Natural Resource Management Model is not independent of the local political context. Devolution of full authority to local institutions is also a crucial issue. The use of pastoral resources in the Sahel region involves a complex mix of use rights, access rights and reciprocity constituting an economy of sharing resources. To facilitate this, the tenure reforms e.g. in Burkina Faso and Niger, require legislative support especially in terms of the mediating role of the state.

In Kenya, the group ranches are legally recognized structures established under the Kenya Group Representative Land Act of 1968 and thus have become a good entry for trainings for group leadership and financial management roles and responsibilities. Consequently, following intensive trainings by DLWEIP in good governance and leadership skills in the management of group ranches, conservancy and conflict resolution mechanisms, the target community are already benefiting. The trained communities have responded by formulating grazing management bylaws and natural resource management plans as good land management practices. In Burkina Faso, trainings in negotiation skills have promoted useful partnerships between the resident populations and the transhumant pastoralists, significantly reducing conflicts between farmers and herders on one hand and



the pastoralists on the other. The local communities/villages also agreed on the ZOVIC management guidelines and preliminary land use system that recognize the needs of the transhumance pastoralists.

In Kenya, project activities were implemented through the Group Ranch Management Boards which are legal entities established under the laws of Kenya. The project promoted and supported the establishment of grazing committees with membership from board members, thus ensuring sustainability of these mechanisms when the project funding is over. The grazing committees also serve as the conflict resolution mechanism on issues relating to implementation of conservancy management plans. By the time of DLWEIP exit workshop was held in February, 2009, the Kenya Conservancy management teams had already defined their way forward for sustaining favorable project outcomes.

In Burkina Faso, project activities were implemented through RECOPA which is an association of local pastoralist groups registered with the government, and through ADELE, a local NGO working with Village ZOVICs which are legal entities. The DLWEIP supported the establishment of an Animal Disease Control Committee with clearly defined roles, responsibilities and operational modalities. However, the target communities did not have the benefit of participating in DLWEIP exit strategy like their Kenyan counterparts.

Lesson learnt

Collaboration across existing governance systems can strengthen the integration of environmental concerns into the wider development agenda. Governance approaches that are flexible, collaborative and learning-based may be responsive and adaptive, and better able to cope with the challenges of integrating environment and development. As observed in the delay of project start up, particularly in Burkina Faso, issues of institutional arrangements need to be addressed early enough in the project initiation stage to avoid misunderstanding especially due to lack of clear roles and authority of the partner/collaborating institutions.

3.4 Supportive policy environment

Efforts to prevent and control land degradation in the savanna ecosystem require a conducive policy environment. In many cases, a policy environment that supports such efforts remains a constraint and cause of failure of natural resource management (NRM) project interventions at country level. In Kenya, the new sectoral and multi-sectoral policies are responsive to community driven NRM initiatives in the drylands. The land policy (draft, 2006), forest policy (2004), water (2002), wildlife (draft 2006) and ASAL (2005) policies are all supportive of emerging community structures whose main objective is encourage community co-management and benefit sharing frameworks. DLWEIP has documented land use and land policy issues to be addressed for the dryland ecosystem and that have the potential to influence government. Among the issues documented is the need to examine the Group Land Representatives' Act and streamline legislation to accommodate conservancies, discourage individual ownership and land sub-division in ASAL areas in Kenya. In this respect, DLWEIP impacts and outcomes are likely to be sustained and institutionalized. In Naibunga conservancy, four group ranches are jointly willing to establish a comprehensive natural resources management plan and to gazette the plan under the National Environmental Management and Coordination Act.



A supportive national legal/policy framework that takes recognition of conservancies is needed to ensure they are legally protected and can thrive. The national governments are promoting community participation in conservation. Kenya wildlife policy draft has recognised the establishment of community conservancies and in Kenya's Vision 2030 these communities managed conservancies create economic opportunities for of the growing tourism industry, one of the key pillars for the realization of the Vision.

There is need to fast-track land reforms to secure and reclaim livestock wildlife environment -interface management areas that act as dispersal area/buffer zones/migration routes for wildlife. It is important to develop community structures that will be able to negotiate with conservation authorities over resource use and park management, and which can actively participate in conservation-related activities. There is need to create partnerships and mechanisms for dialogue, conflict resolution, economic benefit flows and enterprise development.



Community Participation In Natural Resource Management

4.1 Ownership

Community based natural resource management (CBNRM) approach attempts to allocate all or a proportion of ownership, rights and control over natural resources to a section or group of local communities. CBNRM is aimed at enhancing the livelihoods of poor people through improved leadership and economic empowerment within the framework of sustainable natural resource management.

Community participation in management of the project provides an avenue for implementing decision making processes that are legitimate, accountable and inclusive, that take into consideration the needs and interests of the community. DWLEIP has involved the community at all project phases, ranging from conceptualization, formulation, implementation, monitoring and evaluation and also participation in Mid Term Review and identification of an exit strategy before participatory terminal evaluation. During the workshop on DLWEIP exit strategy, the Kenya target communities demonstrated ownership of project outcomes and impacts by their willingness to continue with the good practices using their own resources and utilizing the skills gained from the intensive trainings to leverage additional funds from new sources. This response by the community leaders is a strategy of diversifying sources of income to improve their livelihoods and is a brave attempt to their break dependency on the donor/external support from a single donor. The incremental and catalytic role of UNEP GEF funding has to some extent been realized. The expected social economic and ecological benefits that are likely to strengthen community ownership include: payment of ecosystem services through income from ecotourism; reduction in inter and intra tribal conflicts over natural resources, and improved natural resource based livelihoods.

4.2 Capacity building

DLWEIP project sought to build the capacity of the community to implement and sustain project impacts through relevant training, active involvement and facilitating learning through exchange visits. Trainings encompassed conflict resolution, training of scouts as animal health workers, negotiation skills for nomads to protect their transhumance routes, training on rangeland reseeding, leadership and management skills of group ranch members, and village ZOVIC leaders and managers, farmers and herders, participatory land use planning, and financial/enterprise management skills. DLWEIP implementing partners played a very key role in training the community leaders and women groups in income generating and business skills. The impacts/outcomes of these trainings are already indicated in reduced incidences of conflicts between herders and farmers, and in improved business skills especially among women groups. The willingness by communities to set aside large areas for conservation through the conservancy approach (and the successful reseeding of degraded areas) is an indicator that the DLWEIP approach has been successful in building local capacity to deal with land degradation problems and improved social integration and harmony among different tribes and resource users.



Project sponsored exchange/field visits to view and discuss success stories with other communities outside the project areas provided an excellent platform for exchange of ideas and learning from each other and creating understanding of the concerns of competing natural resource users. For example, exchange visits played a key role in inspiring Kenya Conservancy/community members to undertake conservation and rehabilitation of degraded rangelands as they witnessed its success in other dry areas in Kenya (e.g. Baringo reseeding program). Women attending a training workshop in Kenya

The benefits of trainings are expected to outlive the project thus living a lasting impact by ensuring prudent environmental stewardship. However, the recurrent nature of natural resource based conflicts and the imminent impacts of climate change depicted, for example, by more frequent droughts calls for continued strengthening of the community resilience in adapting to new challenges.

Lesson learnt

Conflict resolution mechanisms show limited involvement of grass root mechanisms in the past. The establishment of community conservancies has had a positive impact since they are increasingly taking up issues of resource conflicts, and dealing with them in more preventive manner. The game scouts in the conservancies are able to predict potential areas of upcoming water and pasture conflicts. The Conservancy Management Committees once informed are able to troubleshoot such problems before they occur, thus emerging as a good avenue for conflict early warning, peace-making and reconciliation.

4.3 Participation in DLWEIP implementation process

In line with GEF's public participation principle, mechanisms to ensure effective stakeholder participation in design, implementation, monitoring, and evaluation phases are an important pillar in the development of sustainable land management practices. Community driven implementation of NRM planning emphasizes active participation of community members all project activities to secure community support and promote a strong sense of ownership. This approach promotes local capacity for successful adoption of good land management practices.

In the DLWEIP, communities in both Kenya and Burkina Faso played an active role in the formulation and implementation of the project. As an example, during Kenya's project exit workshop, the community participants came up with the lessons they had learnt and identified an exit strategy for the project by highlighting the strategies and activities to be taken over by the community once the project ends. This was incorporated in the final project exit strategy.

Community involvement contributes to change in peoples attitude and appreciation of the role that they can play on their own (without external support) to protect and improve the natural resources (animal resources, rangelands and biodiversity) on which their livelihoods depend thus ensuring the sustainability of the project interventions long after external support is gone.



Active participation of the community in project implementation and building strong linkage between the community and partners empowered the community thus contributing greatly to the success and sustainability of community based natural resource management interventions

DLWEIP's involvement of the community members in the project implementation strengthened the community capacity. The involvement of community in identifying lessons learnt is a crucial avenue of actively involving the beneficiaries in a project. The ability of the community participants to identify lessons learnt and strategies for uptake of the project is an indication of the capacity built by DLWEIP. A combination of training and active involvement of community is a key element that can contribute to the process of learning in a project.

Role/participation of youth and women in land rehabilitation and conservation

Youth made significant contribution to the project through engagement as scouts- security surveillance in the conservancy and monitoring activities:-the youth were empowered through training e.g. use of GPS tool. It is expected that engaging the youth guarantees will promote ownership and sustainability of the project in the long run.

Women participated in range rehabilitation through women groups. The project used the existing women group (women owned lodge) as entry points in engaging women in the project.



4.4 Costs and benefits to the community

The co-existence of livestock and wildlife has its associated benefits and costs. The problem of costs and benefits is not one of productivity but of equitable distribution. It is important that the benefit sharing is seen to be transparent, accountable and equitable, with well defined principles and practices that are understood, agreed and accepted. Benefits which accrue from conservation areas at the livestock-wildlife interface include recreation, tourism, watershed protection, sustainability of ecological processes, biodiversity conservation, education and research, and non-consumptive benefits (e.g. historical and cultural). In DLWEIP pilot sites, communities are benefiting from hunting fees charged and from increased income from sale of livestock by nomads during transhumance routes through Burkina Faso. In Kenya benefits include proceeds from ecotourism facilities, grazing fees, improved grazing resources, and honey production among others.. These benefits, however, are not obvious nor are they divided among people in a manner proportional to the 'costs' to local people living near or in a conservation area. The opportunities for benefit sharing partnerships therefore, need to be fully and equitably explored, and should be transparent and accountable, with well defined principles and practices that are understood, agreed and accepted by all beneficiaries and stakeholders. Diversification (alternative livelihoods) reduces the vulnerability of local communities to the unpredictable/erratic nature of revenues from tourism and natural disasters such as drought and floods and also from natural resource based conflicts.



The accruing benefits act as incentives for communities to support conservation and environmental protection leading to long term sustainability of conservation areas. Legislation that enables local communities to receive substantial annual revenues has the potential to sustain conservation efforts. One of the most challenging conflicts would be the one based on benefit sharing. It has been observed that most community projects fail because leaders fail to address conflicts related to benefit sharing especially when most projects succeed. Such challenges are relevant to success story of community conservancies in Kenya. Ecotourism is a growing industry in DLWEIP sites in Ewaso Nyiro Ecosystem. Currently Naibunga, Kalama and Namunyak conservancies have developed clear guidelines and bylaws on how to share the revenue from these activities. For example the Women Eco-lodge in Koija Group Ranch shares some of the benefits with group ranch management, while the rest of the funds go to finance community development activities identified by the women. Some of the revenues from group ranch owned ecotourism activities are used to finance medical expenses, education bursaries and security and water development projects. Another example is the revenue from privately managed Namunyak Eco-lodge which has paid ksh.1.7million (US \$25,000), ksh.3 million (US \$ 43,000) and ksh 5 million (US\$ 71,000) from 2004, 2005 and 2006 respectively. Some of this revenue is used to pay for education, hospital expenses, compensation for wildlife injuries and damages to affected individuals while a part of this revenue also pays for the for operational costs of maintaining the Namunyak conservancy which covers 78,000 ha.

In Burkina Faso, Government land is leased to communities and private concessionaires for hunting. Community hunting land is known as ZOVIC which is viewed as a buffer zone between the community settlements and private concessions. The farmer/herder community owned ZOVICs are being considered for leasing to transhumance pastoralists at a fee. The communities are also keen to forge partnerships with private concessionaires who are well placed to hire ZOVICs during hunting seasons. The private concessionaire benefits from the good community neighborliness, reduction in wildlife poaching and illegal grazing. It is however critical that a socially equitable benefit sharing policy be developed in a participatory manner by the key stakeholders. Currently, the communities are receiving about 3% of hunting benefits while the private operator is pocketing nearly 75% of benefits while Government keeps 22% for both (ZOVICs and private concessions) as tax. (Government of Burkina Faso -Ministers Report on Concessions 2006 unpublished). Unless the social equity principle is followed in both DLWEIP sites in Burkina Faso and in Kenya, improved ecological benefits are likely to lead to more conflicts in the near future

4.5 *Experiences with community conservancies and ZOVICs management practices*

The conservancy model entails conservation of grazing areas for wildlife habitat and as a dry season/drought reserve grazing for livestock. There is a positive impact of this concept in Kenya as reflected in the increase of the acreage under community conservancies. DLWEIP sites have attracted communities from non-target districts to establish conservancies mainly to create ecotourism facilities for community revenue generation and secure the grazing areas from illegal grazers. Communities are also keen to forge peaceful alliance for joint management and utilization of natural resources. This growth will help secure the rich biodiversity of fauna and flora while at the same time the conservancies provide drought/dry season grazing for livestock. The three DLWEIP supported conservancies in Kenya are Namunyak -78,000 ha, Naibunga- 43,000ha and Kalama 15,000 ha. However due to minimum support in term trainings in which neighbouring communities participated, additional conservancies covering a total of over 387,000 ha are already designated as conservancies by three formally hostile tribes- the Rendille, Borana and Samburu. These



conservancies are: Sera conservancy– 300,000ha; West Gate 32,000ha Ltungai Community Conservancy Trust about 55,000 ha. see the map of NRT

The ZOVICS in Burkina Faso are village-managed community wildlife utilisation and livestock controlled grazing areas, which have been receiving hunting fees from Government licensed hunters through private concessionaires. With established dialogue platform supported by DLWEIP, this partnership has led to improved benefits. The Government of Burkina Faso policy that established the Zovics and private concessionaires encourages the sharing of some benefits between the communities and adjacent conservation areas (Arly National Park and private concessionaire).

Though the conservancy model has been well received in Kenya project sites and has the potential approach to strengthen management of communally owned natural resources, the governance structure of conservancies is likely to face challenges in enforcement of group by-laws/rules as only those who are members are bound by the rules and during drought, other communities may invade the reserve grazing areas in the conservancies thereby triggering conflicts. In essence, the successful establishment of conservancies in project area has elicited envy from neighbouring communities who feel they were left out by the project. This calls for concerted efforts and collaboration among communities as well as the support of government and development partners to sustain and out-scale the benefits.

4.6 Community Governance structure and capacity building opportunities

Capacity building at the local, national, and regional levels aims at strengthening community governance institutions and providing an enabling environment that supports sustainable land management. DLWEIP has contributed to policy and good governance for the management of natural resources in the interface through capacity building of local institutions such as the RECOPA, ZOVIC committees, grazing management committees, disease control committees, and women groups.

Continuous community capacity building and trainings will be needed to empower communities to manage livestock-wildlife-environment interface. For example, DLWEIP only trained the current leaders of Group Ranch Management Committees and with election of new committee members for the Group Ranch and Trustees every year, continuous training on the roles and responsibilities of group officials will be needed. Further, the implementation of the monitoring and evaluation framework proposed in the DLWEIP exit strategy will require the communities to be trained on adaptive management to make use of information from the M & E system..Partnership between the government, implementing/ collaborating partners and NGOs experienced in working with communities like the ACC and AWF would be vital in supporting trainings and facilitating knowledge sharing that will enhance the capacity of community governance structures and institutions to manage their resources and improve their livelihoods.

Representation in the community governance institutions should incorporate a wider range of key stakeholders. For instance, the local politicians usually feel threatened if the local peace committees are effective in bringing relative peace without involving the politicians in the negotiation processes. In DLWEIP, the success of peace committees in reducing conflict incidences has been due to the inclusiveness of a wider range of key stakeholders.



Lesson learnt

Range rehabilitation through reseeding: The willingness of the group ranches to set aside land for conservation and active participation of community members in rehabilitation (reseeding) of degraded rangelands was an indicator of community preparedness to embrace new development ideas. The community willingness to try new ideas in rangeland rehabilitation requires a review of the group ranch policy environment to safeguard investors (groups or individual households) who are ready to reclaim the degraded lands as long term strategy.

4.7 Policy environment and economic incentives for institutionalization of good practices

Mainstreaming drylands should occur at the local (community), sub-national, national, regional and global levels in order to significantly impact the livelihoods of many people. According to GEF OP #15, one of the outcomes of GEF supported activities on SLM is the strengthening of policy, regulatory and economic incentive framework to facilitate wider adoption of SLM practices.

DWLEIP outcomes include the disseminations of lessons learnt in form of draft policy briefs intended to inform the government policies affecting management of the ecosystem represented by the DLWEIP sites. It is acknowledged that the successful implementation of the grazing management plans and NRM plans for the conservancies and ZOVICs will depend on legalization and enforcement of group/community by-laws.

The role of communities in conservation and management of natural resources in Kenya is likely to increase as a result of the ongoing national policy reviews that envisage participatory approach to NRM. The new ASAL policy acknowledges the need for participation of the communities in ASAL development initiatives, and diversification of livelihoods, reduction of vulnerability to natural hazards, while the forest policy incorporates participatory forest management through -community forest associations. In addition, NEMA expressed willingness to gazette the community natural resources management plans formulated with DLWEIP funds. The current Government effort to foster infrastructural development targeting the ASALs is an incentive as it will open up these areas to livestock market and ecotourism..

Lesson learnt

Ecotourism business has supported the rapid development of conservancies in Kenya covering about 400,000 hectares within and adjacent to project pilot areas. In 2007 the areas received about 10,000 foreign tourists which is far below the potential visitors carrying capacity. The same potential was noted in Arly National Park and surrounding areas in Burkina Faso. However, it is important to realize that ecotourism business is prone to political instability as witnessed from the effects of the 2007/08 post-election turbulence in Kenya when international tourism was seriously affected and hence it would be unreasonable for the group ranches to rely on it as a sole income generating activity. Diversification of activities is necessary in mitigating such risks.



Lessons and Experiences in Livestock and Wildlife Interface Management in Savanna Ecosystem (Good Practices)

1. Direct facilitation of implementing partners who constitute the national steering committee created synergy and strong partnerships between Government Departments and the Non Governmental Organizations in Kenya, while the process is now on track in Burkina Faso through the facilitation of Ministry of environment (MECV). The Ministry of the Environment and Natural Resources through the GEF operational focal point (NEMA) is eager to support the dissemination of DLWEIP findings as widely as possible during the remaining period.
2. It is important to appreciate the nature of transboundary NRM-based conflicts and therefore the necessity of involving stakeholders from neighboring communities within the country and even across international borders. RECOPA has demonstrated this aspect in the transhumance negotiations among the pastoralists, farmers, herders and foresters in Burkina Faso and neighbouring countries.
3. Compensation of wildlife damage as the wildlife population continues to increase in the conservancies in Kenya is an issue that the communities are now thinking through to see how best to respond to complaints from their members. It is commendable that some of the DLWEIP implementing partners are willing to accompany the affected communities in coming up with sustainable strategy for the payment of some compensation at local level. This strategy is likely to involve charging some extra fees on visitors in the conservancies including levying a fraction of bed night fees.
4. The conservancy and village ZOVICs are relatively new business models for the communities in DLWEIP pilot sites and therefore implementing partners should assist these communities in coming up with a pricing policy that is not totally controlled by outside interests (tour operators and hunters/concessionaires). In Kenya for example Kenya Wildlife Service and other interested stakeholders like the AWF are backstopping the communities by providing background market information and by equipping the communities with some negotiation skills during the development of an agreement with the private sector (tour operators and investors). For example, Tiermamult group ranch leaders have been assisted by AWF to negotiate for a fee of \$20,000 per year for leasing the land for an eco-lodge by a private investor in their conservancy.
5. Mainstreaming sectoral conflicts issues into a national peace building process requires enlisting the support of relevant policy makers on appropriate conflict management approaches. Kenyan experiences from DLWEIP sites have been mainstreamed into a national draft peace building policy. Local politicians usually feel threatened if the local peace committees are effective in bringing relative peace without involving them. The success of peace committees in reducing conflict incidences has been due to the inclusiveness of a wider range of key stakeholders.



6. Ecotourism and community conservation initiatives- These provide wildlife based revenue or reduce community reliance on cattle are also collectively chosen as 'best practices' The selected successes from the region include ecolodges (e.g Koiya Star beds, Il gaboli womens lodge project; Ole Ntile lodge in Kijabe) and other natural resource based enterprises. By providing income based on natural resources, the community is able to understand the importance of conservation. The Scouts Based Natural Resources Monitoring Programme (SBNRM) is a NRM tool at the interface, which is seen as a 'best practice', and particularly recommended for adoption by the Burkina sites. SBNRM has helped predict natural resource based conflicts, provide security and data for scientific -based resource conservation and management.
7. Grazing Management- This initiative has also been picked as one of the best practices from Kenya. The constitution of grazing committees from each group ranch in Naibunga and also in Namunyak and Kalama is an initiative that has pioneered community control over open access resources. Grazing management is a welcome tool in controlling range use at a time when both wildlife and livestock have to be accommodated in a shrinking range as both livestock and wildlife migratory corridors diminish. Grazing management involves zonation and creation of management zones. Already, results are being seen in Kalama, Koiya and Kijabe where zones left exclusively for wildlife are clearly in very good condition and also serve as critical habitats during the extreme dry seasons. However, for this initiative to be ready for adoption, clear and detailed reports on the procedure and results need to be prepared to be available as working documents.
8. Grazing land rehabilitation initiatives -Range reseeding has also succeeded as a 'best practice' for adoption from the Kenyan sites. This activity has proved to be a good strategy to avert range deterioration. With good timing and careful choice of species for reseeding, good results can be attained. It has been a success in Kalama and Tiemamut and if use in conjunction with grazing management, this practice has the potential to allow for a higher stocking rate and better returns from livestock production from the same size of land.
9. From DLWEIP experience of organizing GEF-funded synergy workshop, more lessons were learnt as presented in the text box below:



Lessons on synergy among the GEF projects operating in Savanna Ecosystem in Kenya

DLWEIP organized three synergy workshops which brought together Desert Margin Programme (DMP), Indigenous Vegetation Project (IVP-GEF), Mt. Marsabit Ecosystem Project, World Initiative for Sustainable Pastoralism (WISP-GEF). The workshops identified areas of synergy and collaboration among GEF-funded projects implemented in Kenya and Burkina Faso. The following are the areas of synergy building:

- i. Project design and implementation approaches that ensure interventions address the underlying causes of natural resources /land degradation and not just the symptoms.*
- ii. Projects to share that baseline information databases, findings and lessons learnt through a website link optimise the impacts of GEF projects and avoid duplication of efforts.*
- iii. Regular consultation platforms to be organised by the donor and executing agents/ organisations for sharing experiences and even exchange visits to project sites to learn from each other; the consultation forum to encourage the projects to capitalise on areas of achievements, especially in the aspects of enhancement of community ownerships*
- iv. Ensuring that GEF projects engender effective community participatory process that will mobilise local community support and community awareness to avoid misunderstanding and unrealistic expectations;*
- v. Apply strategies and approaches that strengthen community driven governance institutions (leadership and management committees) through targeted training in organisational and financial management issues*
- vi. The projects to work together in identifying common policy areas for joint advocacy to create an enabling environment for institutionalising good practices in natural resource management.*
- vii. Application of effective implementation strategies of mainstreaming project activities by deliberate involvement of government and NGOs in implementation process through partnership.*
- viii. Share strategies for mobilising community involvement in project planning and implementation process for better ownership of project outputs and impacts*



Cited Literature

Philip Muruthi, 2005. Human Wildlife Conflict: Lessons Learned From AWF's African Heartlands. AWF Working Papers

Jesse T. Njoka, 2008. DLWEIP Mid-Term Review Report

Pierre Hiernaux, 1996. The Crisis of Sahelian Pastoralism: Ecological Or Economic? Overseas Development Institute, Network Paper 39a January 1996.

URL: <http://www.odi.org.uk> (accessed 17 August 2009).

World Resources Institute, 2001. http://earthtrends.wri.org/pdf_library/feature/for_fea_goods.pdf

Charlotte Boyd, Roger Blench, David Bourn, Liz Drake and Peter Stevenson, 1999. Reconciling Interests among Wildlife, Livestock and People in Eastern Africa: A Sustainable Livelihoods Approach. URL: <http://www.odi.org.uk> (accessed 17 August 2009).

Enors E. I. and Gordon L. J., 2007. Analysing Resilience in Dryland Agro-Ecosystems: A Case Study of the Makanya Catchment in Tanzania over the Past 50 Years. *Land Degradation and Development*. 18: 680–696

Pekka Virtanen, 2005. Community-Based Natural Resource Management in Mozambique: A Critical Review of the Concept's Applicability at Local Level. *Sust. Dev.* 13, 1–12

United Nations Environment Programme, 2007. *Global Environment Outlook 4*

Edmund Barrow (undated): *Community Conservation Approaches and Experiences from East Africa*. African Wildlife Foundation. Community Conservation Discussion Paper No. 4 CC-DP-4

What is this Infamous "Wildlife/Livestock Disease Interface?" A Review of Current Knowledge for the African Continent. In "Conservation and Development Interventions at the Wildlife/Livestock Interface: Implications for Wildlife, Livestock and Human Health". The IUCN Species Survival Commission. Edited by Steven A. Osofsky, Sarah Cleaveland, William B. Karesh, Michael D. Kock, Philip J. Nyhus, Lisa Starr and Angela Yang. URL: <http://www.wcs-ahead.org> (Accessed 10 August 2009).

Nicholas Oguge, Caleb Mireri, and Joseph Onjala, 2006. Assessment of status and trends of natural resource use in Ewaso Nyiro basin, Kenya- Report)

Winston Mathu, 2009. Terminal Evaluation of UNEP/GEF Project GF/3010-05-10 (4857) – Dry Land Livestock Wild Life Environment Interface Project (DLWEIP)

Ouedraogo, Hubert M.G. The Land Policy Process in Burkina Faso: Building a National Consensus. URL: <http://www.capri.cgiar.org> (accessed 8 August 2009).

International Livestock Research Institute. Pastoralism Surest Way out of Poverty in East Africa's Drylands. URL: <http://www.ilri.org> (accessed 10 August 2009)



UNDP. Background paper for African Climate Adaptation Forum. URL: <http://www.undp.org>

http://www.blueplanetbiomes.org/african_savanna.htm

<http://www.runet.edu/~swoodwar/CLASSES/GEOG235/biomes/savanna/savanna.html>

<http://www.cababstractsplus.org/abstracts/Abstract.aspx?AcNo=20013151992>

<http://www.undp.org/drylands/drought-workshop-08.html-21>



Other project publications

Simplice Nouala and Mohamed F. Sessay, 2009: Status and Trends of Natural Resources at the Livestock Wildlife Interface Policy Brief 1

Simplice Nouala and Mohamed F. Sessay, 2009: Status and Trends of Conflict of Natural Resources at the Livestock Wildlife Interface Policy Brief 2

Simplice Nouala and Mohamed F. Sessay, 2009: Zoning for Sustainable Resource Use at the Livestock Wildlife Environment Interface Policy Brief 3

Simplice Nouala and Mohamed F. Sessay, 2009: Community Scouts Based Monitoring Programme for Wildlife in Conservancies Policy Brief 4

Agnès GANOUE GNISSI et al, 2009: Le Plan de Gestion Instrument de Gestion Durable des Zones de Pâtures

Agnès GANOUE GNISSI et al, 2009: Sécurisation des Ressources Pastorales La Négociation Comme Outil et Stratégie de Durabilité

Agnès GANOUE GNISSI et al, 2009: Les Règles Locales de Gestion Outil de Gestion Durable des Ressources Naturelles



