

STATUS AND TRENDS OF CONFLICT OF NATURAL RESOURCES AT THE LIVESTOCK WILDLIFE INTERFACE

POLICY BRIEF 2

Protected and non-protected areas interface in Africa pose various management opportunities and challenges arising from diverse needs the interface represents. These ecosystems are rich in biodiversity, supporting livestock production for pastoral livelihoods, wildlife conservation, tourism, and agricultural activities.

Changes in land use at the interface areas have been accompanied by increasing resource and human conflicts and insecurity. Driving forces for insecurity and conflicts consist of internal as well as external factors.

Security, peace and harmony can be realised at the interface and the neighbouring areas by building the capacity of the communities in conflicts resolution, in addition to addressing both the root and proximate causes of the conflicts.

In some areas, the establishment of community conservancies has improved the quality of natural resources management, improved people's livelihoods and enhanced security, peace and harmony among the people.

In other areas, the absence of peace and harmony is increasingly impoverishing the people, making them to resort to unsustainable NR utilization practices that are precipitating severe land degradation and unprecedented loss of biodiversity. This becomes a negative feedback loop.

Key Questions

1. What are the root causes and driving forces of the conflicts in the livestock wildlife interface?
2. How are the current status and trends of conflicts and insecurity affecting livestock production, wildlife conservation and other natural resources utilization in the interface areas? Are the trends sustainable?
3. In what ways or approaches can the local communities' capacities be empowered in decision-making on resource conflicts resolution in order to sustain security and peace? How can other conflicts such as banditry and cattle rustling be minimised?
4. What can governments or NGOs do to promote conflict resolution, security and peace in the dryland environments? How can interventions be formulated to address the circumstances of communities in these areas?

A: Trends at Ecosystem Level

1. Stiff competition of natural resource use exists between livestock resources in mixed production ecosystems and protected areas at the interface .
2. Livestock wildlife interface environments have witnessed increasing trends of resource conflicts and insecurity. These trends are driven mainly by internal factors:
 - a. Burgeoning human population from natural growth and immigration into food insecure zones. The immigrants are often of different culture unfamiliar with the unique natural resources management challenges the interface presents.
 - b. Increased competition among ethnic groups over declining pasture and water resources leading to tribal/ethnic conflicts.
 - c. Worsening land degradation problems due to unsustainable livelihood based on charcoal burning and devegetation, poaching, and consumption of bush meat.
 - d. Declining water resources, destruction of catchment areas and over abstraction of water for irrigation (upstream/downstream users). Irrigated agriculture is a non-sustainable land use initiative in these areas due to its encroachment on grazing lands, over-abstraction of water and increasing the incidences of human-wildlife conflicts following crop raiding.
 - e. Migration of pastoralists and wildlife upstream to areas under private land tenure system leading to systemic conflicts.
 - f. Wildlife menace in predation on livestock, destroying crops and human injuries and death.



DLWEIP

Dryland Livestock Wildlife Environment Interface Project



DLWEIP WORKING POLICY BRIEF

3. **External driving forces of resource** conflicts and insecurity include:
- Land privatisation and other government external forces such as economic, policy, unclear boundaries and competition of resources, poor infrastructure and conflicts.
 - Climate change resulting to increased frequency of protracted droughts and floods, as well as accompanying disease outbreaks that prompt quarantines.
 - Changing national and international markets for livestock and rangeland products and policies and standards that precipitate impacts on the grassroots.
 - International insecurity, terrorism, cross border conflicts and porous national borders. These affect the tourism industry, precipitate refugees problem and worst result in small arms proliferation/trade and legal guns.

Indicator of Good Practice at the interface, Kenya

Namunyak Wildlife Conservancy Trust (NWCT) was formed in 1995 initially bringing together 2 group ranches and which later increased to three groups. The Board of Trustees consists of 16 members 11 of which were of formal level of education while 5 were of informal level. Some of the income generating activities include:- Rental houses; Sahara camp run with partnership with a private investor; Micro enterprises ; Rock climbing; Camel riding and bird shooting. The ranch had a income of Ksh.11m from donors and Ksh.3 million from business activities. Any profit from business activities is shared 60% for community while 40% is used to support the Trust operations.

The mission and objective of the Trust is conservation of natural resources for benefit of the members in accordance to empower the community economically.

Indicators of good practices in Namunyak Conservancy NWCT has improved the livelihoods of the members in:

- Employment 43 permanent staff and over 200 casual workers employed at one time or another throughout the year. Revenue Generation from Sarara Camp and Ololokwe Cultural Safaris in 2002 was US\$ 12,105, allocated according to community priority needs as follows:
 - educational bursaries - \$3,896;
 - compensation for wildlife damages -\$1,000;
 - Community projects \$5,910;
 - endowment fund \$1,299.
- Improved security for the people, property and wildlife - the trust is supporting a local security system where issues of livestock raids, wildlife poaching and banditry incidences are reported and stopped at early stage. Consequently the incidences of cattle rustling, highway banditry and wildlife poaching has dramatically reduced. Wildlife numbers has increased due to increased security.
- Support to community projects: water projects, self help projects, educational bursaries among others.
- Biodiversity conservation - area has witnessed increasing elephant population, self introduction of wild dogs, the use of corridors.
- Number of partnerships arrangement has increased - Lewa Conservancy, KWS, Acacia Trails (in charge of Sarara Camp).
- Sustainability issues - Institutional (governance system); financial sustainability, and social aspects are all considered and working well towards self reliance in meeting core funds.

4. **Non-sustainable practices at the livestock wildlife interface in the entire ecosystem include:**

- Overstocking and overgrazing** giving way to a severely degraded landscape and very poor range condition in places. Loss of vegetation cover leaves the area exposed to risks of soil loss, soil degradation and invasion by alien species.
- Charcoal burning and fuelwood collection** is impacting woodland resources leading to land degradation. As a result Acacia tortilis and other indigenous woody species are threatened.
- Loss of communal pasture**, woodlands and other natural areas for grazing or collecting a host of range resources due to bush encroachment and invasive species. Bush encroachment impedes wildlife sighting by tourists besides increasing incidences of predation.
- Over abstraction of water resources** for irrigation by commercial farms and giving rise to water-use conflicts. For instance, over the 3 decades water flow at Archer's Post in Ewaso Ngiro basin has declined from 4.5 cubic meters per second in 1970's to 0.9 cubic meters per second in 1990's as a result of catchment destruction and changes in land use in upstream and down stream.
- Poaching and killing of wildlife** for bush meat or sport which is a non sustainable utilization of wildlife resources.
- Non-involvement of women and youth** in decision making pertaining natural resources and conservation efforts while they are the active NR managers.

B: Trends at Project Level

Drivers of good practices. The transition from extensive towards intensive, sustainable, and well managed ecosystem has occurred in several places among them the DLWEIP pilot sites (Kalama, Namunyak and Naibunga). The formation of conservancies by the communities in group ranches is being driven by:

- The success stories in the neighbourhood (Lewa Down, Il Ngwesi, LWF) and fervor to learn from each other. Private ranches and initiatives have been successful in initiating good conservation practices, integrating wildlife and livestock resources and tapping benefits from tourism and related activities.

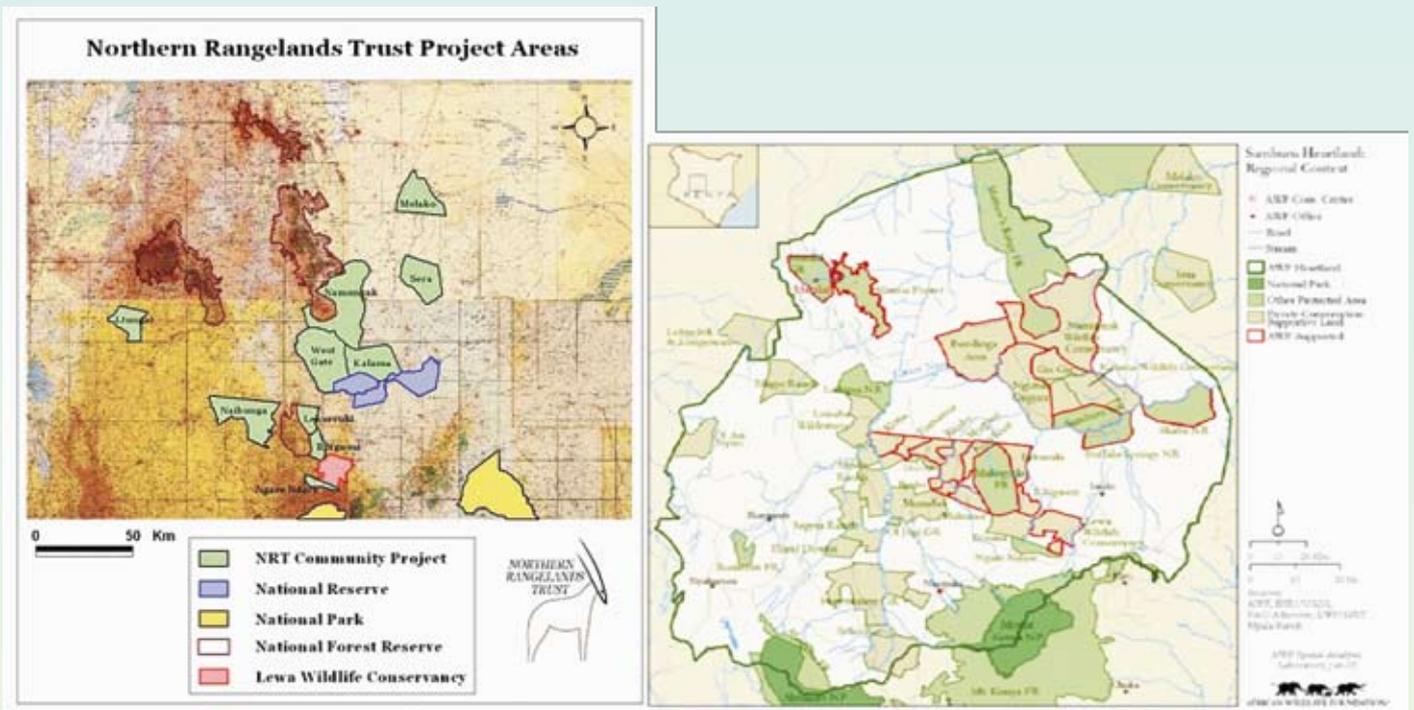


Fig 1. Left Map of Samburu and Laikipia Districts of Kenya showing status of community based wildlife conservation programmes (adapted from Northern Rangeland Trust 2003 by Oguge et. al., 2006). Right - A map of African Wildlife Foundation's Samburu Heartland showing locations of Naibunga (a), Namunyak and Kalama (b). (Source Oguge et. al., 2006).

- b. Need to combat insecurity among the communities resulting from banditry incidences, cattle rustling and poaching.
- c. Need for alternative source of livelihood as livestock tend to be stochastic in tandem with the climatic factors (frequent and protracted droughts and floods, diseases and quarantines, poor marketing infrastructure).
- d. Availability and access to donor support in cash or in kind is encouraging the communities to form conservancy trusts. This support would be scarce outside an institutional framework that conservancies are giving.
- e. Need for security of land tenure, access rights and benefit sharing among the conservancies' constituent group ranches under the Group Land Representative Act 1968.
- f. Synergy in partnerships and collaboration with an array of other institutions (LWF, NRT, KWS, AWF, ACC, GoK through various Ministries, among other partners).

Pressures being exerted on land resources due to natural and /or human activities that may not be compatible with sustainable use of natural resources - hence becomes a driving force in land degradation. The conservancies are acting as good avenues for building the capacity of communities to deal with land degradation problem.

Improved management of natural resources at the interface will present opportunities for marketing of biodiversity and other rangeland products thus help the community to address their livelihood problems.

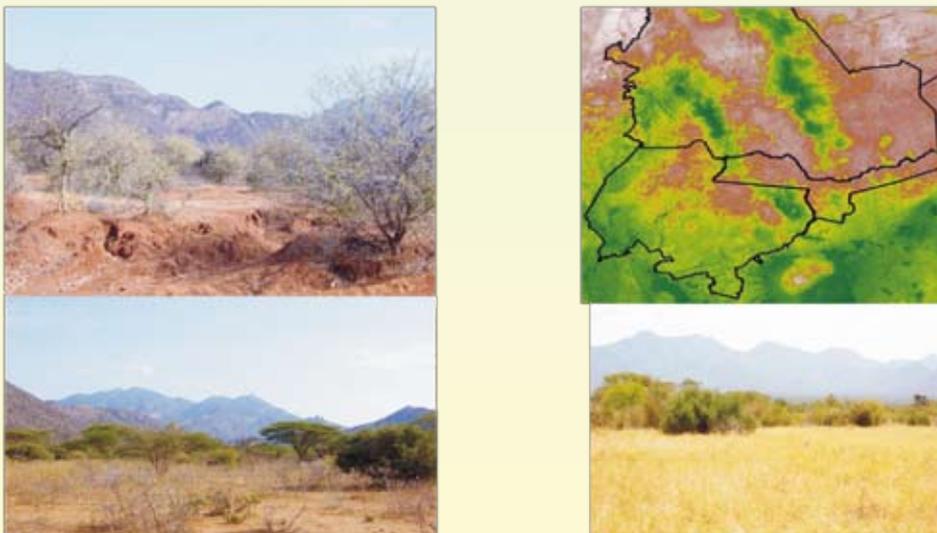


Figure 2. (a) Panoramic and (b) satellite imagery of the Ewaso Basin showing extensive poor range areas. Namunyak conservancy showing differences in grass biomass in (c) overgrazed and (d) core conservation area around Sarara Eco-Lodge. (Source Oguge et. al., 2006)

DLWEIP aim is to mainstream biodiversity and livestock resources at the interface between mixed production ecosystems and protected areas in Africa through the promotion and support to sustainable land management systems for livestock and wildlife at the interface to improve livelihoods, biodiversity conservation and reduce land degradation.

This is being achieved through development and testing of good practices at the interface at two pilot sites in representative agro-ecological systems, in Kenya and Burkina Faso.

Major institutional partners include UNEP/GEF, African Union Bureau of Animal Resources (AU-IBAR), World Conservation Union (IUCN), African Wildlife Foundation (AWF), the African Conservation Centre (ACC), and both Governments of Kenya and Burkina Faso.

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The size of the areas set aside for conservation by the communities is an indicator of their willingness to embrace active management of wildlife alongside other livelihood mechanisms. This achievement needs to be applauded with not only words but also much support.

C. Policy issues in sustainable resource management at the interface include:

1. Environmental considerations for wildlife protection and conservation should not overshadow the livestock based livelihoods. Livestock development policies should not be ignored.
2. Invest in infrastructural development of livestock marketing facilities.
3. Land use zoning around protected areas should be enforced and appropriate development agenda compatible with domestic livestock/wildlife management at interface be introduced.
4. Community based Eco-tourism initiatives be supported and community capacities to manage such enterprises be enhanced.
5. Governmental policy and programmes have frequently changed affecting land management. These include access to credit, price incentives, subsidies for veterinary drugs, the strength of extension services, decentralisation and centralisation of land management authority, and land tenure arrangements.
6. Integrated community-level land use planning to optimise water, grazing and woodlands resources.

D: Future Trends

1. Dryland livestock wildlife interface areas will witness more areas being reserved for conservation initiatives as the communities indicate a favour for mixed livestock and wildlife production systems. These community-based and managed initiatives will be important avenues to combat poverty, natural resource degradation, insecurity and resolve resource conflicts and conserve biodiversity in the ecosystem. Key drivers are international/cross border security, and growth in tourism industry
2. Thus, a lot of patience is called for as communities establish the conservancies, learn to work in synergy with other pro-wildlife initiatives and partners, embrace sustainable NRM at their locality and make sound decisions regarding leadership, governance and management of the conservancies.

Summary

- a. Land degradation is ensuing in areas where no conservation efforts are going on.
- b. The conservancies on the other hand present avenues to empower the communities for sustainable land use, and encourage good practices that will improve their livelihoods, conserve biodiversity and reduce land degradation.
- c. The poverty/ land degradation relationship is real, reinforced by gender disparities.
- d. 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.
- e. Supportive policies and programs may have a large impact during this transition period, when economic returns to investment in the natural resources may be met in the short to medium term.
- f. Promotional of sustainable alternative income generating initiatives such as bee-keeping are essential to a productive and sustainable ecosystem.
- g. The current and especially future situation is most critical in semi-arid areas where the marginality and vulnerability of the human and environmental systems overlap.

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