



ZONING FOR SUSTAINABLE RESOURCE USE AT THE LIVESTOCK WILDLIFE ENVIRONMENT INTERFACE

POLICY BRIEF 3

In most areas within the livestock wildlife environment interface, nomadism by pastoralists is gradually being replaced by sedentarism and migration corridors are closed by settlements from the ever-increasing human population. Faced by a reducing pasture resource and yet slow to adopt de-stocking, pastoralists have now embraced the practical and novel 'Conservancy' concept in order to earn from tourism and subsidise income from livestock. However, sustaining wildlife on pasture land is a challenge that has now found a solution in the form of conservancy zonation schemes.

Key Questions

1. What are the key ecological constraints in the coexistence of livestock and wildlife in the conservancies?
2. What are the important resource management regimes that allow coexistence of livestock and wildlife in the community conservancies?
3. In what ways or approaches can the local communities' capacities be empowered in decision making on resource use in order to allow sustainable use of pasture?

A: Trends at Ecosystem Level

1. There is severe degradation of the environment including soil erosion, deforestation and poaching.
2. The communities' options for continued nomadism are rapidly declining as corridors to distant pastures are blocked by settlements and fencing.
3. Communities are now adopting sedentary pastoralism but this has led to overstocking
4. Communities are embracing tourism as a way of income generation to subsidise livestock production
5. Livestock production and wildlife conservation on the same land is a challenge that requires new approaches
6. Communities have adopted the 'Conservancy' concept that caters for wildlife and livestock as well as other community amenities and lifestyles (DLWEIP 2007)
7. For the conservancy concept to succeed, management strategies are required to safeguard sustainability
8. Zonation is one of the most crucial management strategies for natural resource use at the livestock wildlife environment interface.

Zoning as part of managing the Livestock-Wildlife interface areas such as conservancies is one of the most important, yet also difficult task that is undertaken during sustainable resource use planning. Zoning is important because it reflects a commitment by the communities to conservation. In zoning, the community sets aside an investment from which they expect returns.

Community members participate in a joint PRA exercise to demarcate zones for conservation, multiple uses and for settlement. Each zone is clearly defined in order to promote the integrity of the ecosystem and natural resource base. The management zones take account of local conditions and current uses (IUCN 1994). Three zone categories are usually proposed according to the activities which will be allowed in any particular zone.

- a. Core (preservation) zone
- b. Buffer zone (low intensity, multiple use zone for grazing and conservation)
- c. High intensity use zone (for all other activities including settlement)

The focus for the zoning plan is to provide a framework for maintaining the integrity of the Wildlife Livestock Interface ecosystems while promoting wise use of the resources for sustainability and community benefit. Zonation is carried out in line with the natural resources conservation and management objectives as well as the by-laws set by the community relating to conservation, grazing, environmental protection and management.

DLWEIP

Dryland Livestock Wildlife Environment Interface Project



DLWEIP WORKING POLICY BRIEF

B Rationale and reasons for zoning

- a. To harmonize conservation, grazing, tourism, enterprise development and settlement
- b. Arid areas are a fragile ecosystem and have the potential of being degraded due to impacts arising from unsustainable human use.
- c. Zoning is a sure way of fodder conservation 'in situ' for use during the dry season
- d. The areas are basically an open access property resource and zoning accompanied by by-laws will help bring sustainability.

C Zoning considerations

In delineating use zones, the community considers the current status of the following variables for their area:

- a. Seasonal waters use and distribution,
- b. Seasonal pasture use and distribution,
- c. Wildlife distribution and densities,
- d. Resource conflict hotspots,
- e. Settlement patterns and areas of exceptional resource values/tourism/culture etc

1. Core (preservation) zone

This zone is also referred to as the low intensity use zone. Best areas under this category have good wildlife habitat, water, and are usually the best places to find wildlife.

Purpose: This area should be strictly protected and preserved in its pristine state and should only be used for wildlife conservation.

Permitted Development

No developments should be allowed here. No major road network is allowed except well maintained game drive tracks to discourage off-road driving. There is no settlement and no grazing allowed here. Low impact tourist activities like bush walking may be allowed but no facilities may be allowed here. Continuous monitoring is done to maintain the integrity of the area.

2. Buffer Zone (low intensity multiple use zone: Grazing and Conservation)

The buffer zone is the transition zone between the core area and the high use or settlement area. The area is mainly used as dry season grazing area.

Purpose: This area is used as dry season grazing for livestock and as a wildlife dispersal area.

Permitted Development

No settlements are allowed in this area. Communities are allowed to carry out cultural activities such as harvesting of herbal medicines on a controlled basis and to do rituals with higher impact on the environment than those allowed in the core zone. Activities practiced here should be compatible with the core zone's conservation objectives. The zone will also deter encroachment into the core zone. Development of road network for tourism and other forms of access is allowed. Temporary campsites may be allowed but no permanent tourism facility may be erected here.

3. High intensity use zone

This zone includes the lands which are outside the core and buffer zones but within the conservancy.

Purpose: This area provides the local community with space to practice their economic activities such as settlement

areas, schools, shopping centres, as well as grazing. To minimize environmental degradation, communities should be educated on better land management practices, soil and water conservation, and alternative income generation activities.

Permitted Development

The permitted developments should emphasize activities that have minimal negative impact on the natural resource base/environment but yield benefits for the community. Communities to be advised on appropriate land and livestock management strategies to minimize environmental degradation enhance productivity and improve livelihoods.

D Indicator of Good Practice at the interface, Kenya

1. Zoning and grazing management at Naibunga Community Conservancies

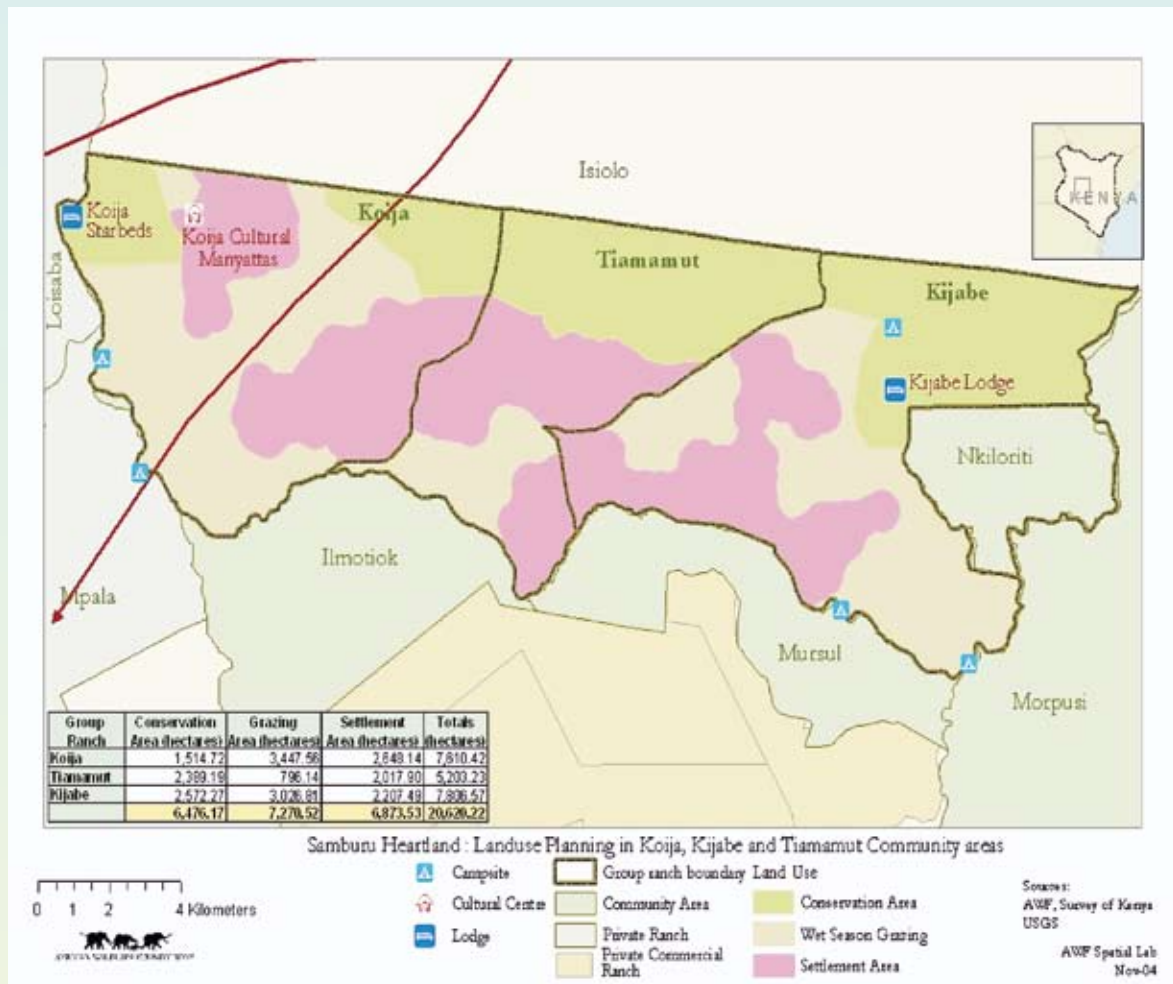
Naibunga Community Conservancy is a conglomerate formed by nine group ranches that have come together, pooled resources and set aside contiguous areas in each of the ranches as conservation areas. Although these nine group ranches are at various stages of implementation of their individual group strategies, three of them, Tiamamut, Kijabe and Koiya have made very encouraging steps in embracing the conservancy concept. With the technical input and support from African Wildlife Foundation under the DLWEIP project, the communities have developed natural resource zonation plans to regulate and control resource use such as grazing in the conservancy. Using the PRA technique, the communities have developed zonation plans that have been developed into zonation programmes.

The community has set aside about 30% of their land for conservation as core area, 30% as dry season grazing area (Buffer zone) and the rest as multiple use area. The core areas though have tourist facilities in Koiya (Koiya Star Bed) and Lentile Lodge in Kijabe. There are also several campsites. The management programme involves three major components

- i. Zonation mapping
- ii. Grazing management in the grazing areas and
- iii. By-laws to ensure compliance.

The grazing management is a key component for the success of zoning. Each of the three group ranches has constituted a grazing committee that oversees the compliance to the grazing zonation and seasonal plans. The grazing committee is backed by the by-laws enacted by the community as well as the authority and blessing of the elders. Those who break the grazing bylaws are fined.

When there is prolonged drought, the income derived from tourism is used to lease grazing rights for the livestock of the group ranch members within the neighboring private ranches.



Koiya group ranch grazing management plan: The Proposal is to have all the people settle in the area near the border with Musul Ranch and divide the grazing area into three blocks i.e Block A Loreto area; Block B Kijabe/Tura area and Block C Ngabolo.

The ranch has 100 households. The ranch can accommodate 750 T.L.U. This means each household will keep 7.5 L.U approximately 8 L.U. This works out to 8 cattle or 40 sheep or goats or different combinations of the same. Members agreed to destock from the current levels of 2070 L.U to 750 L.U.

A 3 year grazing plan was developed so that the reduced herds are to be in each of the blocks for a period of 4 months in rotation in a manner allowing for grazing and resting in different seasons of the year. This would ensure different intensities of grazing in each of the blocks in a rainy season within the first two years.

		J	F	M	A	M	J	J	A	S	O	N	D
Year 1	Block A	///	///	///	///								
	Block B					///	///	///	///				
	Block C									///	///	///	///
Year 2	Block A					///	///	///	///				
	Block B									///	///	///	///
	Block C	///	///	///	///								
Year 3	Block A									///	///	///	///
	Block B	///	///	///	///								
	Block C					///	///	///	///				

2 Trends at Project Level

Drivers of good practices. The establishment of the zonation programme at the three DLWEIP project sites in Koiya, Kijabe and Tiamamut has led to similar initiatives in several other conservancies and group ranches in Laikipia and Samburu. Kalama conservancy, Namunyak as well as other group ranches in Naibunga are taking up the challenge and establishing zonation programmes.

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 success stories from these three group ranches is indicated by the presence of More wildlife in better habitat, a secure dry season grazing plan, reduced loss of livestock during drought and increased income from ecotourism.

3 Other drivers of good practice include:

- Need to improve range for dry season grazing and reduce livestock loss in dry season
- Need to diversify income and reduce reliance on livestock production
- Need to improve range condition to attract wildlife to community areas from their concentrations in the private ranches so as to create a base for tourism
- Ensure sustainability of the livestock and wildlife environment interface under a sedentary regime occasioned by corridor blockage, increased regional resource conflicts and land tenure changes
- Improved collaborations and support from other institutions (LWF, NRT, KWS, AWF, ACC, GoK and AU) in natural resource conservation and improved livelihoods.

E Policy issues in relation to land use zonation for sustainable resource management at the interface

- Wildlife conservation and management: All the legal requirements of CAP 376 must be fulfilled and the conservancies must work with the Kenya Wildlife Service to ensure compliance
- Land use development in the proposed development zones must be compatible with conservation. Strict adherence to the relevant existing laws and policies such as EMCA must be ensured
- Zonation programmes need to be incorporated into the Conservancy management plans so that the conservancy managers and community committees work in harmony
- Conservancy and zonation by-laws be gazetted to improve compliance and empower the various compliance committees.
- Increased investment is required in development of livestock marketing facilities in order to increase livestock off-take and absorb the surplus gains made from improved range management
- Increase government support to community disease monitoring and control committees, and improved delivery of veterinary services
- Community based Eco-tourism initiatives be supported and community capacities to manage such enterprises be enhanced.
- Harmonisation of regional zonation programmes to reduce conflicts related to outsiders grazing on zoned community conservation land when owners are conserving such land.

Summary

Natural resource zonation programmes that have been developed in the three group ranches within Naibunga conservancy at the DLWEIP project sites have been a success in the realization of success in the conservancy concept. Communities are empowered to plan, regulate and enforce compliance with natural resource utilization for sustainability and prosperity. The success gained at these sites is being adopted elsewhere in Laikipia and Samburu and is expected to expand into other livestock and wildlife environment interface sites in Kenya and Africa. However, unfavourable trends in land use and land tenure regimes threaten then success of this noble approach to conservation and community development. All stakeholders will need a concerted effort to support the success of this initiative.

References

- Oguge, N., Mireri C. and Onjala J. 2006. Assessment of Status and Trends of Natural Resource Use in Ewaso NyiroBasin, Kenya. World Conservation Union (IUCN) Report for DLWEIP.
- Olima, W. and Nzianga H. 2006. Assessment of Land Use policies in Kenya. World Conservation
- Mwaura F. 2006. Assessment of Natural Resource Utilization in Samburu and Laikipia with special emphasis on Namunyak, Kalama and Naibunga Conservancies. African Conservation Center (ACC) Report for DLWEIP.
- Karani E and Kiboi M. 2006. Report on formulation of settlement and grazing management by laws for Kojja, Tiemamut & Kijabe group ranches. Report to AWF and DLWEIP
- Msafiri, F 2006. KTK- grazing management plans and by laws. Report to AWF and DLWEIP
- Wahungu, G.M (2007) Wildlife and habitat monitoring programme for Naibung'a Conservancy: Scout Based Monitoring Training. Report to AWF and AU-IBAR.
- Kenya and Bukina Faso Implementation Progress Synthesis Report (2007). Africa Union, IUCN, AWF, GEF, UNEP, Government of Kenya.
- IUCN, 1994. Guidelines for Protected Area Management Categories. IUCN, Switzerland.

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