

# COMMUNITY SCOUTS BASED MONITORING PROGRAMME FOR WILDLIFE IN CONSERVANCIES

## POLICY BRIEF 4

Monitoring is an essential activity in virtually all managed wildlife conservation and management enterprises. Information from monitoring activities is needed for planning, management, impact assessment, education and evaluation of management activities. Resource conservation endeavors that directly impact on, are driven by or, are geared towards community development should integrate community participation in the monitoring system. Monitoring data by DRSRS over the last twenty years indicate that most wildlife species in the ecosystem outside national parks in Kenya have declined in populations while livestock numbers have been on the increase. Development approaches that lead to the improvement of natural resources at the community level and more efficient livestock production and marketing, will in turn lead to less poverty and environmental degradation. The latter will be achieved through community capacity building involving training, introduction of good natural resource management practices, and entrepreneurship. The Kenyan Dry land Livestock and Wildlife Environment Interface Project (DLWEIP), An African Union Inter-African Bureau for Animal Resources (AU-IBAR) and African Wildlife Foundation (AWF) have developed a Community Scout Based Natural Resources Monitoring Programme for Naibung'a Conservancy of Laikipia District in February 2007. A wildlife and habitat monitoring programme was established at four group ranches in Naibung'a conservancy including Tiamamut, Kijabe, Kojia and Nkiloriti.

### Key Questions

1. What are the temporal and spatial trends in wildlife and livestock numbers and movements in the conservancy?
2. What are the trends of natural and human activities and their impacts on wildlife populations and habitat?
3. What are the best approaches to improve and enhance security for people and wildlife at the livestock wildlife environment interface?
4. How can communities in group ranches within the livestock wildlife interface be empowered to participate in management and decision making in sustainable use of natural resource?

### A: Trends at Ecosystem Level

1. There is more wildlife in private ranches in Laikipia than on neighbouring community land where livestock dominates
2. There is severe degradation of the environment including soil erosion, deforestation and poaching
3. There is intense internal and regional conflict over natural resources within the livestock wildlife environment interface
4. Wildlife based enterprises such as ecotourism development are fast expanding as communities diversify sources of income to subsidize livestock production
5. Livestock production and wildlife conservation on the same land is a new approach in community conservancies whose success depends on close monitoring of resource dynamics

### B. Resource monitoring

A common problem in the management of protected areas in most developing countries, including Kenya, is that most are managed without the benefit of any scientifically based principles as no data on wildlife and habitat is ever collected. Even where data is collected, a priori logical and systematic, easily repeatable sampling procedures are lacking and data collected can not therefore be analysed, interpreted and applied in management. Elsewhere data may be collected using appropriate sampling procedures, analysed and used for management, but more often than not this data is limiting in that it is collected locally and may not be of wide application to varying ecosystems requiring different management approaches. A community scouts monitoring programme is based on the premise that it is possible to cost - effectively monitor wildlife and habitat in any landscape by using employed or volunteer community game scouts to collect basic inventory and monitoring data. The use of such community enumerators will ultimately enhance the appreciation of wildlife by rural communities and thus achieve a sustainable balance between



# DLWEIP

Dryland Livestock Wildlife Environment Interface Project



## DLWEIP WORKING POLICY BRIEF

the conservation of biological diversity, economic development and maintenance of associated cultural values. Through a monitoring programme, all community conservancies are able to share information on the status and trends of natural resources and security to enhance development and address internal and external threats. The Monitoring programme increases the participation and cooperation of all stakeholders in conservation like pastoralists, ranchers, regional and local NGOs, CBOs, relevant government departments, conservation agencies and others with interest in monitoring for multiple-use, sustainable regional development and other complementary purposes..

### B Rationale and reasons for zoning

- a. The transient, dynamic biotic and abiotic resources that are shared across ecosystems.
- b. The migratory nature of many important wildlife species that depend upon corridors and dispersal areas in the different for different parts of their life cycle.
- c. The economic reliance of each administrative location upon renewable resources from the conservation landscape
- d. A regional interest in providing a sustainable economy, and a safe, stable and secure environment for those communities dependent upon the interface resources for a livelihood.

The community monitoring programme developed for Naibung'a is run by scouts with between high school education to as low as lower primary education provided they can read and write. Scouts were trained on natural resource conservation issues and on monitoring. They were trained in observations, measurements, filling of data sheets and use of monitoring equipment such as GPS and maps. Trained, literate scouts were then paired with nontrained and sometimes illiterate scouts so they work in pairs. This facilitates peer training as well as complements use of both formally and informally educated youth.

### C Indicator of Good Practice at the interface, Kenya

#### 1 Scouts Monitoring Training

##### a. Steps in designing the monitoring programme

- i. Mapping of existing habitat and wildlife resources within Naibung'a including conservancy and ranch boundaries, and the current land uses, community zonations and land cover.
- ii. Mapping and identification of all existing biophysical resources in the landscape. These included: Hills, Rivers, Animals, Vegetation, Wetlands, Man made features e.g. dams, wells, weirs, rock catchments and other relevant features of the landscape.
- iii. Using a standard weighting procedure, (by using importance values of these resources e.g. endangered species, rarity, fragility of habitats etc), to develop a detailed resource analysis to prioritize resources that need frequent monitoring (keystone species and habitats) and those that require attention in the near or distant future.

This analysis was also used to make decisions on what habitat types to lay transects and how much of each habitat type would be covered by the transect.

#### 2 Identification of existing threats, risks and impacts to the management of the landscape.

It was necessary to conduct an analysis of the current and potential human activities in the conservancy. Activities that pose threats to the fauna and flora (poaching, charcoal burning, and grazing and illegal settlements. animals, killing of animals) were identified for monitoring. Threats were identified using the PRA method during sessions on monitoring training.

#### 3 Monitoring Training

##### a. Theory

- i. Introduction to Conservation of Natural resources
- ii. The basic concepts of monitoring
- iii. How to integrate law enforcement patrols and monitoring data collection
- iv. Use of data forms
- v. Skills for recording data
- vi. Preparing data collection and patrol timetables
- vii. Entering information in occurrence books
- viii. Data sheets handling and management
- ix. Ethics in data collection

##### b. Field practice

- i. Selected simple survey techniques commonly used in monitoring
- ii. Identifying different habitat types for purposes of entry in data sheets
- iii. Map reading
- iv. How to use a compass
- v. Navigation using a GPS in holdings with little incentive for sustainable natural resource management. In the past, the communities have often incurred more direct and indirect costs than benefits for having wildlife in their vicinity.



- c. **Lack of alternative livelihoods** drives the degradation of communal land resources leading to diminishing grazing resources, fuelwood and medicinal herbs and eventually loss of livelihoods. Poverty then, becomes more of a driver than an impact.

#### 4 Monitoring transects:

Monitoring is carried out by observing and recording data while walking along defined line transects. Transects were therefore established in the four group ranches using criteria described in step 4 (3.1.3 above). Transects were also laid with the consideration that security and monitoring of threats took priority over monitoring to collect scientific data. Transects therefore covered more distance in areas prone to conflict and where risks for poaching and livestock rustling are higher. Scouts are also aware that security patrols will take priority. Transects were also laid to pass through lookout points like hills and to end or begin at roads or road intersections for ease of navigation. Transects were therefore laid as follows:

##### a. Tiamamut: Four transects:

7 km, 7.3 km, 6.1 km and 7.8 km. Each transect takes approximately two hours to two and a half hours to complete.

**Kijabe:** Three transects: 6.5 km, 9.5 and 7.5 km. Completion of the transects takes between two and three hours.

**Nkiloriti:** Three transects measuring 3.9 km, 4 km and 4.5 km were laid out here. Completion of the transects takes between three and four hours despite the transects being relatively short, due to the rough terrain.

**Koija:** Four transects: 9 km, 10.2 km 11.9 km and 12.1 km. These transects are the longest and take approximately three and a half hours to complete.

#### 4 Monitoring and patrol integration

The monitoring system should not distract scouts from their original object of patrols viz deter illegal activities. Therefore the level of detail in the data sheets is fairly balanced with the practical aspect of keeping to the objectives of the patrol.

#### 5 Monitoring evaluation and Feedback

Feedback on the Scouts based monitoring programme is required in the form of an evaluation with regard to the following:

- The quality of data collected
- How data is used, including analysis and feedback to management
- How many more scouts have been trained by the already trained scouts

#### 6 Challenges to the implementation of the Monitoring programme

- Most of the group ranch scouts and the group ranch managers and committee members were not trained but will have to supervise the scouts' activities.
- As an incentive to work, scouts will need some allowance as most work on a voluntary basis as they wait to get jobs elsewhere.

- For the monitoring programme to succeed, an enthusiastic person must be in charge in each ranch. It is important for managers and scouts to work together.
- Equipment shortage is a challenging drawback to the success of the project. Scouts need uniform, GPS, battery charging equipment, some mode of transport such as bicycles and radio communication.
- There is need to strengthen the chain of command from scouts to managers and on to data analysis experts with regard to data handling procedures.
- Liaison with a natural resource research or training institution and collaboration in data analysis and provision of feedback is essential as the conservancies do not have staff to do this initially.

#### 7 Trends at Project Level

Drivers of good practices. The scouts based monitoring programme at Naibunga is a model that can be easily replicated at other project sites in the conservancy. Although only four Ranches were covered in the training and establishment of the programme, other ranches have shown willingness and are requesting for support to adopt the model.

#### 8 Other drivers of good practice include:

- The need to gather data to show trends in wildlife, livestock and illegal activities in the conservancy
- Need to provide security and reduce incidences of poaching, cattle rustling and other resource conflicts
- Need to monitor compliance with grazing zonation to allow coexistence of wildlife and livestock.
- 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
- Improved institutional collaborations in natural resource conservation and improved livelihoods.

#### D Policy issues in relation to monitoring 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
- Monitoring and 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 are gazetted to improve compliance and empower scouts and other conservation committees.



Scouts ready to walk a transect



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.

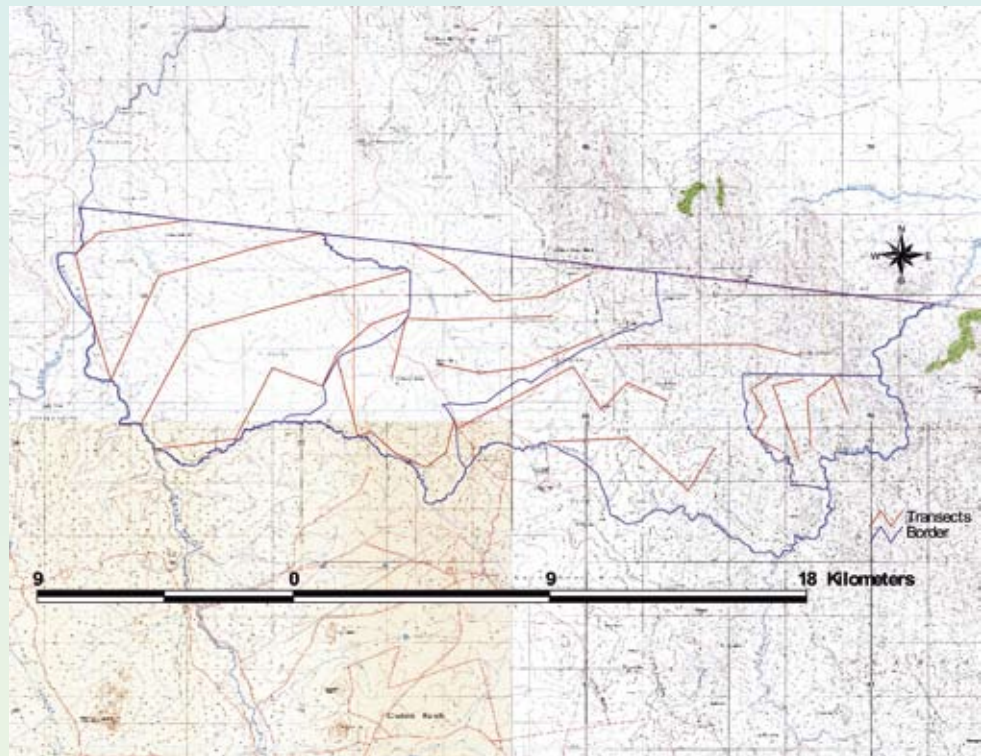
This is being achieved through development and testing of good practices at the interface at two pilot sites in representative agro-ecological systems, in Kenya and Burkina Faso.

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.

#### CONTACTS:

AU-IBAR  
P.O. Box 307896 00100  
Nairobi, Kenya  
Email:  
ibar.office@au-ibar.org /  
nouala.simplice@au-ibar.org  
Tel: +254-20-3674000  
Fax: +254-20-3674341

UNEP/DGEF  
Dr. Mohamed F. Sessay  
P.O. Box 30552 00100  
Nairobi, Kenya  
Email:  
mohamed.sessay@unep.org  
Tel: +255-20-7624294  
Fax: +254-20-7624041



4. There is need to negotiate with investors to employ trained community scouts as incentives to other volunteer scouts.
5. Increase government support through conservation institutions such as Kenya Wildlife Service to the community scouts in areas of common interest
6. There is need to give more support in training and capacity development for the sustainability of the monitoring programme.
7. Harmonisation of the monitoring programme with other monitoring programmes to create a regional programme bearing in mind the transient nature of the resources.

#### Summary

The Natural resource monitoring programme that has been developed in the four group ranches within Naibunga conservancy at the DLWEIP project sites are a good model in harnessing community capacity in sustainable natural resource management. Monitoring will provide useful data for use in decision making. Monitoring data is particularly important to evaluate the success of other programmes such as land zonation and grazing programme. This programme can not succeed without support from regional partners as the resources being monitored are dynamic and transient. The programme will need support in training, capacity building and technical support at the initial stages as well as monitoring to ensure it is self sustaining in the long term.

#### 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.
- 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 Koija, 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.
- DLWIEP (2007) Kenya and Bukina Faso Implementation Progress Synthesis Report (Kenyan Component). Africa Union, IUCN, AWF, GEF, UNEP, Government of Kenya.

This brief was prepared under the "Dryland Livestock Wildlife Environment Interface" project funded by UNEP-GEF by Dr. Simplicie Nouala and Dr. Mohamed F. Sessay.

Copyright © 2008 by the:

African Union-Animal Bureau of Animal Resources (AU-IBAR), United Nations Environment Programme/ Division of Global Environment Facility Coordination (UNEP/GEF), World Conservation Union (IUCN), African Wildlife Foundation (AWF), African Conservation Centre (ACC) and Governments of Kenya and Burkina Faso.

